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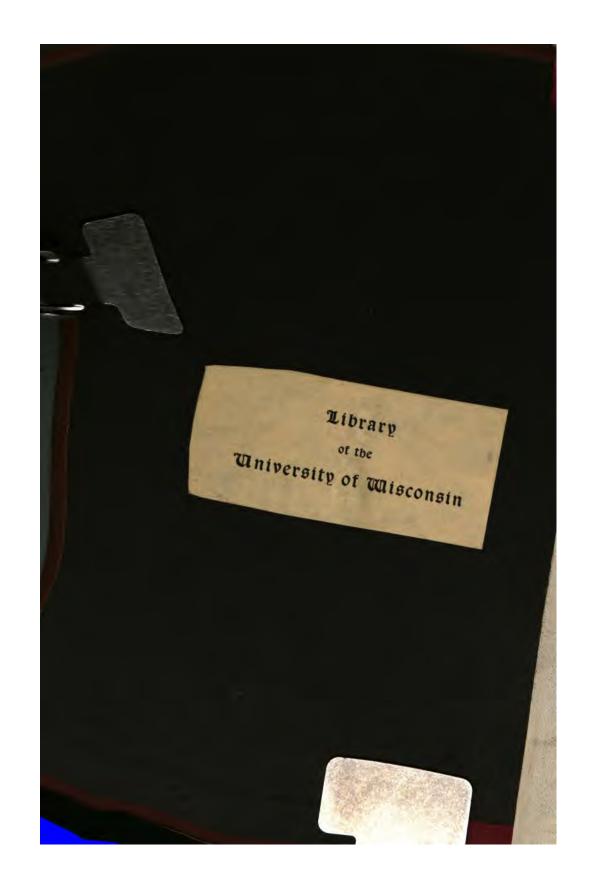
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THE

ENGINEER'S VALUING ASSISTANT.

ENGINEER'S VALUING ASSISTANT

BEING A PRACTICAL TREATISE ON THE

VALUATION OF COLLIERIES AND OTHER MINES

WITH RULES, FORMULÆ, AND EXAMPLES

ALSO

A SET OF VALUATION TABLES

CALCULATED ON THE PRINCIPLE OF
ALLOWING INTEREST TO A PURCHASER OF ANY ANNUITY, BENEFIT, OR
INCOME, DERIVED, OR TO BE DERIVED FROM MINES OR
OTHERWISE, AT ONE RATE OF INTEREST AND REDEEMING THE
CAPITAL INVESTED AT ANOTHER PRACTICAL RATE
OF INTEREST

AND

TABLES OF VALUE

SHOWING THE DISCREPANCIES EXISTING IN THE ORDINARY TABLES OF PRESENT VALUES AND THE ERRORS CREATED BY THEM

 \mathbf{BY}

H. D. HOSKOLD

CIVIL AND MINING ENGINEER; CHIEF OF THE ABGENTINE GOVERNMENT NATIONAL OFFICES OF MINES AND GEOLOGY, ETC.

WITH AN INTRODUCTORY NOTE

BY THE LATE

PETER GRAY

HONORARY MEMBER OF THE INSTITUTE OF ACTUARIES
AUTHOR OF 'TABLES AND FORMULÆ FOR THE COMPUTATION OF LIFE CONTINGENCIES' ETC.

SECOND EDITION

LONGMANS, GREEN, AND CO.
39 PATERNOSTER BOW, LONDON
NEW YORK AND BOMBAY
1905

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PREFACE

TO

THE PRESENT EDITION.

Soon after the first edition of this work appeared in 1877, copies of it became so scarce that suggestions were frequently made to the author to publish a new edition of it; but, at that time, important professional duties and undertakings led him to foreign countries, including the Argentine Republic, in the latter of which he has had the honour of occupying the position of Chief Advising and Acting Mining Engineer to the National Government for over a period of 18 years. The onerous duties of that office, and other matters connected therewith, absorbed the whole attention of the author, and it is only recently that he has been able to prepare a second edition of his 'Engineer's Valuing Assistant' for the press.

For various practical reasons, the original book of 1877 has been reduced in bulk; but, at the same time, everything essentially necessary to aid the profession in the valuation of mines and other properties has been retained in the present edition.

The deferred periods, in Table X, have been reduced from 10 to 4 years, for the reason that it is considered that a period of from 4 to 5 years is a sufficiently long time to wait before benefit accrues from mining undertakings.

Names XIV I I I I I and XVIII giving to erred names in to present assess.

The general executes of mine-califation, recurring in the first entiron, we mutted a single leading example, with peculiar manufactistics, laying only seen retained.

The excellent and important 'Introductory Note,' contributed to the first edition by the late amented Mr. Peter Gray, one of the ablest mathematicians of his time, has also been retained, not only on account of its great value in demonstrating scientifically the correctness of the principles laid down by the author, but as a memorial to that distinguished scientist. The references only have been altered, to agree with present pagination.

The author again takes this opportunity of expressing his thanks to the scientific press for the favourable opinions manifested upon the merits of the first edition, and he is content to present this second edition to their consideration, liberality, and just appreciation.

Hornes Aires: May 1, 1904.

PREFACE

TO

THE FIRST EDITION.

THE efforts put forth in the literary world at the present time, and the facility of production and means of distributing the results of such labours, are truly astonishing, and without a parallel in past times, and for the multiplication of Books of all classes there seems to be a growing necessity, but although various subjects connected with Arts, Sciences, and Manufactures have been largely treated upon, that of the Valuation of Mines has been entirely neglected.

This circumstance is the more surprising inasmuch as the subject is one of great national importance, affecting as it does,—at least in some degree—the interest of all those who are connected with Mining and other branches of industry.

In these times, commercial prosperity in general seems to depend more or less upon its relations to honest and successful Mining adventure; and although Mining and other branches of trade have received and will still receive healthy stimulus, nevertheless there are periods of reaction, causing depression, the origin of which it is not always easy to trace and explain. However, in very many cases it may be referred to inflated notions of speculation, creating undue excitement, error in judgment, and an unwarrantable lavish expenditure of capital

upon properties not capable of yielding profits compatible with the outlay.

Immense sums of money are frequently spent in the purchase of mineral properties, and it is a common occurrence that much more is paid in order to secure them than they are really worth, and cases coming within experience are by no means few where the estimated value has exceeded the true value by 40 or 50 per cent., due in many cases to the employment of an erroneous years' purchase. Table XII exhibits the *source* of such discrepancies.

True value, and the economic expenditure of money upon the purchase and development of any property, are therefore matters of such paramount importance, that it has been considered necessary for the general interests of the public to point out in this work, and illustrate by ample practical examples, how such discrepancies as those referred to have arisen, and the means necessary to be adopted in guarding against such an enormous waste of Capital.

Taking a rational view of the matter, it is desirable that any mode of deducing Values, having for its basis nothing better than an approximate rule, or a mere guess, should yield to more accurate treatment; and as the interest at stake is so great, and almost universal, it seems to be most essential that the public should possess some standard work of reference—embodying information and easy rules of a reliable and practicable character, so that by mere consultation, the comparative merits and value of Mineral and other kinds of property that may come under consideration may be readily determined. Hitherto, however, no work of this description and specially devoted to this subject has appeared.

The present work is therefore an attempt to supply this need; and it has been written chiefly with a view to facilitate such calculations as are required generally, and especially by

those of the Profession on whom more particularly devolve the important and onerous duties connected with Valuation, to introduce a general system based upon equitable and scientific principles, and to assist in obtaining more uniformity and accuracy in general practice.

In past years, when I was extensively engaged in valuing coal and other mines, the labour connected with the necessary and frequent calculations involving the use of rules derived from first principles became so tedious, that I determined once for all to prepare full and complete sets of Tables required, to be employed in Valuation as *labour-savers*.

After much thought and labour this task has been completed, and the result supplied by the publication of this work, in which I have endeavoured throughout to render the treatment of the subject as simple and intelligible as its nature seemed to admit of, and, as I believe, free from all unnecessary mathematical surroundings.

I particularly desire to record my thanks to many friends for their kindness in expressing a favourable opinion of my work while it was in MS., and for encouragement which I received from them as to the necessity for the publication of such Among these gentlemen I may specially mention such eminent authorities as Peter Gray, Esq., F.R.A.S., F.R.M.S., M.Inst.A., London; Robert Hunt, Esq., F.R.S., Keeper of the Crown Mining Records, Museum of Practical Geology, Jermyn Street, S.W.; J. Pease, Esq., M.P., Hutton Hall, Gisborough; Warrington W. Smyth, Esq., M.A., F.R.S., F.G.S., Chief Inspector of Crown Mines, Museum, Jermyn Street; D. T. Ansted, Esq., M.A., F.R.S., F.G.S., Melton, Suffolk, and 4 Westminster Chambers, Westminster; Emerson Bainbridge, Esq., M.E., Assoc. Inst.C.E., Mining Engineer to the Duke of Norfolk, Nunnery Colliery Offices, Sheffield; Thos. Wm. Lewis, Esq., F.G.S., M.Inst.C.E., Civil and Mining Engineer (Past President of the South Wales Inst. of Engi-

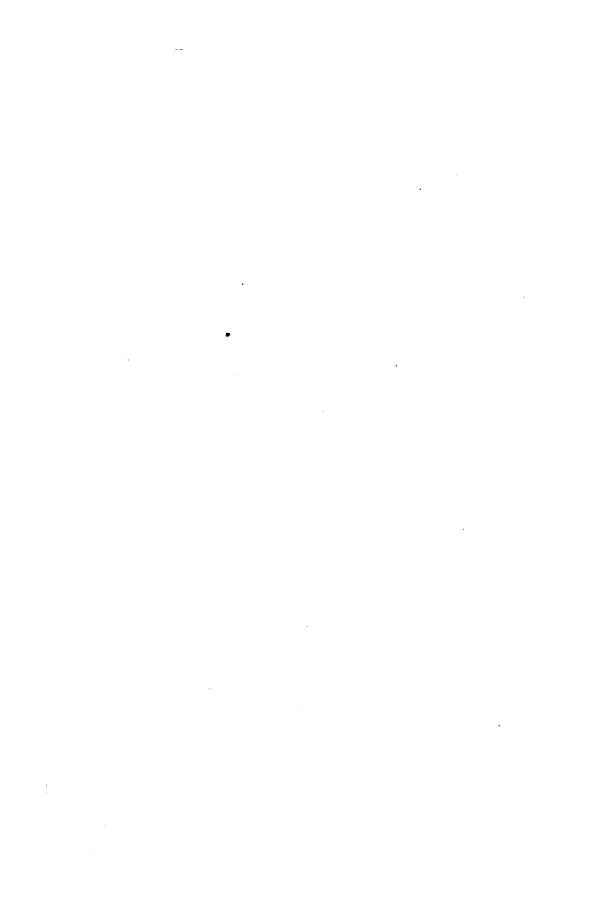
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INTRODUCTORY NOTE

BY

PETER GRAY, F.R.A.S.

Honorary Member of the Institute of Actuaries, and Author of 'Tables and Formulæ for the Computation of Life Contingencies' &c.



INTRODUCTORY NOTE.

THE present Work, on the subject of the Valuation of Mineral Property, contains matter of very great interest for both the Professional Valuer and the Actuary:—for the former in its ample discussion of the principles which should guide him in the discharge of his duties; and for the latter in its treatment of the problems (of a somewhat unusual character) which arise in the practical application of those principles, as well as in the mass of Original Tables it contains, specially adapted for the easy and exact solution of any case that may present itself. The Tables occupy no fewer than 157 pages, and of themselves form a standing monument to the perspicacity and industry of the author.

There is found to exist among professional valuators some diversity of opinion and practice in regard to certain points in the purely actuarial portion of their work; and upon these points I have been requested to give my opinion. I will do so as briefly and plainly as I can, supporting my views with the requisite amount of demonstration, occasionally diverging, perhaps, into cognate matters that may press themselves on the attention.

The course of proceeding in the Valuation of a Mine appears to be as follows:—The valuator, in the exercise of his professional skill and knowledge, names a sum and a term of years, the former to be considered as the annual income to be derived from the mine, and the latter as the number of years that this income is to last. It is further arranged between the parties, that the purchaser is to be allowed a specified rate of interest on his outlay, during the entire term. The required value is thus presented in the form of an annuity certain, the elements of which—the sum, the term, and the rate—are known; and there remains only the conversion of that value into a present sum.

One of the points on which I am requested to give my opinion is as to the correct method of valuing the annuity which forms the subject of the valuator's first determination.

Ordinarily the valuation of an annuity for a term of years, when the rate of interest to be allowed to the purchaser has been arranged, is a sufficiently simple matter. The well-known tables of Smart (reproduced by Jones in his *Treatise on Annuities*), and others, furnish, in the cases that usually arise, all the aid that can be required, even by the most inexperienced computer. But the cases with which we have here to do are somewhat complicated by the entrance of a consideration that does not present itself—in so pressing a way, at least—in general practice.

It cannot be doubted that the purchaser of an annuity for a term, on which he is to be allowed interest at a specified rate, ought, as regards this transaction, to be in the same position, pecuniarily, at the end of the term, as if he had lent his money during the term at the same rate. The lender receives his interest annually, and has the sum lent returned at the end of the term. But the purchaser of an annuity must recoup himself by investing the excess of his annuity over the annual interest on his outlay, at such a rate that at the end of the term his capital will be reproduced. The lowest rate at which this reproduction can be assumed by the vendor or purchaser to be effected, is the rate allowed in the purchase of the annuity, as will presently be shown. In the case of annuities purchased at current rates, but little inconvenience and loss will occur to the purchaser from this restriction as to the rate of re-investment, since practicable rates in respect of such will usually differ but little from the stipulated rates. In the cases with which we are here concerned, however, the state of matters is far other-In the purchase of mining property the purchaser, for reasons with which we have nothing here to do-they are fully discussed in the following work—is usually, perhaps always, allowed a rate of interest on his outlay far exceeding that at which he can invest the surplus of his annuity, which is called with propriety the Redemption Fund; and hence, if the ordinary tables are used in the valuation of the annuity determined and assigned by the valuator, the result must be a loss to the purchaser, more or less heavy according to circumstances, since

in them the difference between the two rates is ignored. In the present connection, therefore, special methods must be employed.

I will show here, first, that to reproduce the capital at the end of the term, when the tabular value of the annuity is used, the redemption fund must be invested at the *stipulated* rate, that is, the rate allowed to the purchaser; and I will then show how, when the *practicable* rate is taken account of, the value of the annuity may be correctly determined.

Denote by a the annuity for n years, and by P_n the purchase money, which is to yield the purchaser r' per \mathcal{L} on his investment.

The tabular value of the annuity is, we know,

$$P_n = \frac{a(1-v^n)}{r'}, \text{ where } v = \frac{1}{1+r'}; \dots (A)$$

whence

$$a = \frac{P_n r'}{1 - v^n}$$

Now, a year's interest on P_n , the purchase-money, is $P_n r'$, and therefore, in accordance with what is above stated,

$$a - P_n r'$$
, or $\frac{P r'}{1 - v^n} - P_n r'$,

is the redemption fund; and it has to be shown that this, if invested as it accrues, at the rate r', will amount to P_n in n years.

$$\frac{P_n r'}{\mathbf{I} - v_n} - P_n r' = \frac{P_n r' - P_n r' (\mathbf{I} - v^n)}{\mathbf{I} - v^n} = \frac{P_n r' v^n}{\mathbf{I} - v^n}$$

Multiplying numerator and denominator by $(1 + r')^n$, this expression becomes,

$$\frac{P_n r'}{(1+r')^n-1};$$

and this we know is the annuity which, at the rate r', will amount to P_n in n years. And it is thus shown that when the value of an annuity is determined by the *common tables* (for those tables consist of series of values of $\frac{1}{r} - \frac{v^n}{r}$), it is neces-

sary, in order that the capital shall be reproduced at the end of the term, that the redemption fund should be invested at the rate allowed to the purchaser.

I am now to show how, when the stipulated rate—that allowed to the purchaser—is r', and the practicable rate—that at which the redemption fund can be invested—is r, the correct value of the annuity may be determined.

Let, as before, a be the annuity for n years to be purchased, and P_n the purchase-money.

The redemption fund is $a - P_n r'$; and if we denote by M_n the amount of an annuity of £1, for n years, at the rate r (the practicable rate), the amount of the redemption fund at the end of the term will be $(a - P_n r') M_n$. Hence, since this, by condition, is to equal the purchase-money, we have the following equation:—

$$P_n = (a - P_n r') M_n;$$

and from this we get,

$$P_n = \frac{aM_n}{1 + r'M_n} (1)$$

This is the value required; and it is in a form very convenient for calculation, either by logarithms or otherwise. The form, however, may be varied. Thus, dividing numerator and denominator by M_n , we have,

$$P_n = \frac{a}{\frac{1}{\overline{M_n} + r'}}; \quad . \quad . \quad . \quad (2)$$

and $\frac{\mathbf{I}}{M_n}$ being the annuity which will amount to £1 in n years—in other words, the redemption fund necessary to produce £1 in that time—at the rate r, if for $\frac{\mathbf{I}}{M_n}$ we write s_n , the expression assumes the more compact form,

$$P_n = \frac{a}{s_n + r'}; \quad . \quad . \quad . \quad . \quad (3)$$

and this is the most convenient for use when, as in the present volume, we are furnished in Table V with the values of s_n for all terms and rates that can present themselves in practice.

The form chiefly, for special reasons, used by Mr. Hoskold in the body of the work, is the basis of (3), by substituting in it for s_n its value, $\frac{r}{(1+r)^n-1}$.

We thus have,

$$P_{n} = \frac{a}{\frac{r}{(1+r)^{n}-1} + r'}, \text{ or } \frac{a}{\frac{r}{R^{n}-1} + r'}, \dots (4)$$

writing R for 1+r.

I give now a numerical example, in further illustration of what precedes.

Let the annuity be £100 for 20 years, on which the purchaser is to be allowed 5 per cent., while the redemption fund can be invested only at 3 per cent. The present value—the purchase-money—is required.

I shall solve this first by the formula (A), which ignores the difference between the stipulated and the practicable rates.

The formula is, for this case,

$$P_{20} = \frac{100 (1 - v^{20})}{.05}.$$

This might be worked by Table IV, which gives the value of v^n for all required rates and terms. But it is easier to take at once the value of the annuity of £1 for 20 years, from Table XII, p. 170. We thus have $P_{20} = £1246.221$.

This value fulfils the condition of replacing the capital at the end of the term, if the redemption fund can be invested at 5 per cent.

Thus, a year's interest on the capital is 62.311, and hence the redemption fund is 100 - 62.311 = 37.689. Now, the amount of £1 per annum in 20 years, at 5 per cent., being (Table III, p. 64) 33.0660, that of 37.689 will be 33.066 \times 37.689 = £1246.223, establishing the theorem.

On the other hand, if the redemption fund can only be invested at 3 per cent., its amount at the end of the term will be no more than (p. 62),

$$26.8704 \times 37.689 = £1012.718,$$

showing a deficiency of £233.503.

I now give a correct solution by (3).

The formula is,

$$P_{20} = \frac{100}{8_{20} + .05}$$

$$s_{20}$$
 (p. 82) ${}^{\circ}03721571$ at 3 per cent.
 ${}^{\circ}05$ ${}^{\circ}08721571$ $\log \frac{2}{2}.9405948$
 $\operatorname{colog} 1.0594052$
 100 $\log 2.$
 P_{20} 1146.582 $\log 3.0594052$

Hence, £1146.582 is the value sought, and it fulfils the prescribed condition as follows:—

A year's interest on P_{20} , at 5 per cent. is 57.329, and the redemption fund, therefore, is 100 - 57.329 = 42.671. And $26.8704 \times 42.671 = £1146.582$, as it ought to do.

It is needless to enter on an inquiry as to the comparative advantages of the expressions that have been given for the solution of the problem under consideration, for in truth almost every case under the problem that can present itself has been already solved, and the solution is recorded in the following work; so that it is very rarely indeed that there will be occasion to have recourse to any formula. Tables VI to IX, occupying pages 93 to 139, give the years' purchase, that is, the value of P_n on the supposition that the annuity to be purchased is £1, for every practical combination of the stipulated and the practicable rates, with the element n, the duration of the annuity; so that to complete the valuation there only remains the multiplication of the proper tabular value by the annuity whose value is required. The process, in fact, is entirely assimilated to that requisite in the use of the common tables, with the important distinction in the results that, in Mr. Hoskold's tables, due account is taken of the disparity between the stipulated and the practicable rates, while in the common tables this disparity is altogether ignored.

Table XII is very instructive. It shows, for various combinations of the *stipulated* and the *practicable* rates, the excess of value assigned by the *old* (the common) tables over the true value for every pound of annuity purchased. I leave this table to make its own impression.

I have now indicated with sufficient distinctness that the method of valuation which I have sought to illustrate, and which is that advocated and employed by Mr. Hoskold, is the correct one. But before leaving the subject I would call attention to

a variety of the problem which presents itself to be dealt with when, as is sometimes the case, the annuity to be purchased is deferred; that is, which, while making the same number, n, does not commence its payments till after the lapse of, say, t years. The symbol for the value of the annuity, when subject to this condition, might with propriety be $P_{t\,n}$.

The value here, in accordance with a well-known principle, is,

$$P_{t,n} = v^t P_n$$
, or $\frac{P_n}{(1+r')^t}$;

equivalent forms, since v^t and $(\mathbf{I} + r')^t$ (in which r' is the stipulated rate), are reciprocal, each to the other; and hence, when the value of an immediate annuity is found (or known), that of the same annuity, when deferred, can be readily deduced.

A demonstration is given also, by Mr. Hoskold, on p. 12, founded on elementary principles. And I may remark that it is, as I believe, only now, that, for the first time, the value of the deferred annuity is correctly assigned.

Here, too, as in the case of the immediate annuity, the wants of the computer have been anticipated and supplied by Mr. Hoskold. Tables X and XI, occupying pages 141 to 166, contain the values, for most practical rates, of a deferred annuity of £1 (the number of years' purchase), the periods of deferment ranging from 1 to 4 years. In consequence, the necessity for having recourse to a formula will very rarely occur, the value required in any particular instance being usually obtainable from the tables named by the merest inspection.

It is only such as have had some experience in the construction of tables who will be able to realise the great amount of labour involved in the formation of those that have been specially referred to—I mean Tables VI to XI; but it is very certain that

Mr. Hoskold uses P_{t+n} . The form above suggested seems on the whole preferable; the suffix t+n, being the sum of the periods of deferment and duration together, is the entire term over which the transaction extends. [I will add that, having instinctively here written deferment, while Mr. Hoskold writes deferrence, I have been accustomed to do so on the authority of the late Prof. De Morgan (Compan. to the Almk., 1840, p. 16). I find neither of the words in the dictionaries to which I have present access; probably, therefore, both may be equally legitimate—or illegitimate.]

everyone who may have occasion to use them for practical purposes will bear willing testimony to their great utility.

On pages 8 to 10 Mr. Hoskold points out, demonstrates, and freely uses a relation that may be thus enunciated:—

The annuity for n years that \mathcal{L}_{I} will buy, exceeds the annuity that will amount to \mathcal{L}_{I} in n years, by r, the interest of \mathcal{L}_{I} for a year.

This relation I find is not unknown to some actuaries; nevertheless, as it has not yet, so far as I know, found its way into the books, it may be worth while here to place it on record.

The proof is very simple. The annuity for n years that £1 will buy is,

$$\frac{r}{1-v^n}$$

which we may write thus,

$$\frac{r(1+r)^n}{(1+r)^n-1};$$

and the annuity that will amount to $\mathcal{L}I$ in n years is

$$\frac{r}{(1+r)^n-1}.$$

Subtract now the second from the first, and we get

$$\frac{r(1+r)^n}{(1+r)^n-1} - \frac{r}{(1+r)^n-1} = \frac{r\{(1+r)^n-1\}}{(1+r)^n-1} = r;$$

and so the theorem is established.

The foregoing relation can be shown to hold from other considerations than those adduced above. The formula (3), p. xvi, ante, when a = 1, becomes

$$P_n = \frac{1}{s_n + r'},$$

and denotes the value of an annuity of $\mathcal{L}I$ for n years, at the rate r', when the redemption fund is invested at the rate r; and if r' = r, the value indicated is that of the ordinary annuity. In this case then $s_n + r$ will be the annuity for n years that $\mathcal{L}I$ will buy, since this annuity and its present value are mutually reciprocal. And hence, since s is the annuity that in n years will amount to $\mathcal{L}I$, we again see the relation to subsist.

I will just add by way of corollary, that, the value of the annuity which \mathcal{L}_{I} will buy being of course \mathcal{L}_{I} , and that of the annuity which in n years will amount to \mathcal{L}_{I} being v^{n} (since this is the value of \mathcal{L}_{I} to be realised in n years), the difference of these values is $I - v^{n}$. Now this must be the value of an annuity of r, (the quantity by which the annuities themselves differ,) for n years. And this is seen to be the case as follows:—

$$\frac{1-v^n}{r} \times r = 1 - v^n.$$

There is another point in the valuation of Mining Property in regard to which diversity of opinion and practice exists among valuators; and on which also I have been requested to give my opinion. The point here referred to arises as follows:—

A mine is to be sold having a specified term to run. The valuator, in the exercise of his best judgment and technical skill, assigns the annuity on which the purchaser may probably reckon during the term of duration, with the rate of interest to be allowed him on the purchase-money. Here a new consideration sometimes—perhaps I should say frequently—arises. The sum named by the valuator as the probable annual return to the purchaser is that which he considers ought to be the return if the mine is fully At the same time he may be of opinion that to bring the mine into this condition an expenditure of greater or less amount in the early years of the mine is necessary. these circumstances he does not abate from his estimated annual return, but names a sum, as cost of development, to be expended by the purchaser in equal portions during the first few years of the mine, to bring the mine into the required condition; and which sum consequently, when valued subject to the conditions of its disbursement, will constitute a deduction to be made from the gross value of the mine, so as to determine the amount of the portion of this value payable to the vendor. And it is as to the manner in which this deduction is usually made that I am requested to give my opinion.

For illustration I quote a case given by Mr. Hoskold, p. 26. The term of a colliery for the next 21 years is to be sold. It at present yields a net return of £8,000 per annum; and the valuator estimates that to maintain the return at this rate,

during the term, it will be necessary for the purchaser to expend in works, &c., £12,000, in equal portions of £4,000 during each of the next 3 years. Also, the purchaser is to be allowed 20 per cent. per annum on his outlay, redeeming his capital at 3 per cent. Required the net amount now payable.

I will determine the required amount first in the customary vay.

By Table VII, p. 120, the gross value of the mine is $4.25764225 \times 8,000 = £34,061.138$

And the abatement is :-

Cost of works, &c. . . . £12,000

Interest on the same, 3 years at

Net amount now payable . . . £20,261.138

Now this cannot be correct. The abatement here is the amount in 3 years, at 5 per cent. simple interest, of the disbursements to be made by the purchaser; and it could be legitimate only if the entire £12,000 had been disbursed three years ago. The purchaser in fact receives a bonus for delaying payment of a portion of the purchase-money—a bonus, moreover, which increases as the delay increases.

Surely nothing further needs be said to establish the inadmissibility, in accordance with any rational or recognised principle, of the method just exemplified for determining the net amount now payable.

The following shows the manner in which I consider the required determination ought to be made:—

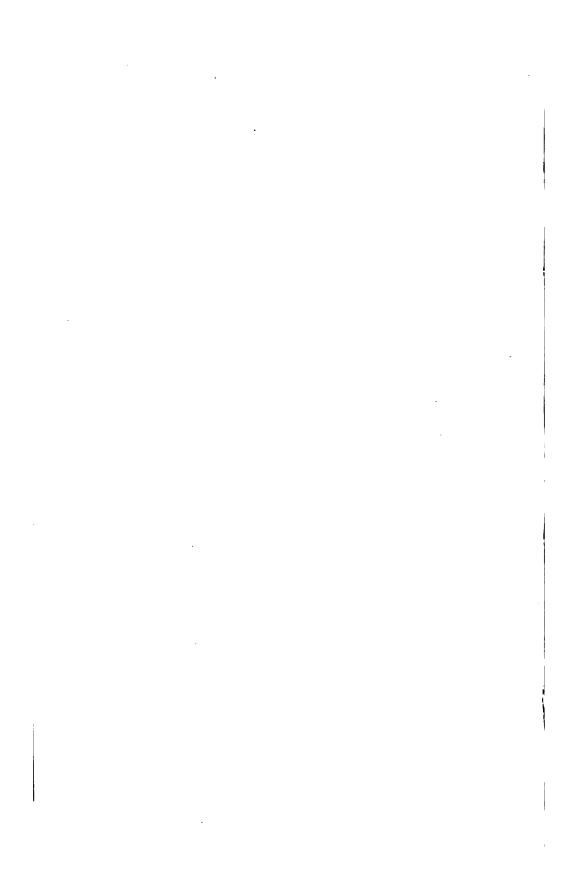
 The annual payments to be made by the purchaser constitute an annuity, and there exists no conceivable reason why they should not be valued as such.

The only point in regard to which there may be thought to be room for question as to the validity of the method here employed, is the rate at which the annuity of £4,000 ought to be valued; and somewhat plausible reasons might be adduced for making the valuation at the rate of 20 per cent. I am quite satisfied, however, after full consideration, that any arguments in this sense that could be assigned are groundless. The purchaser is entitled to £20 per cent. on his outlay, which is the gross value of the mine. It is true that a portion only of this—in the present case the larger portion—goes at once into the pocket of the vendor; but the rest is expended in the amelioration of the property, whereby the purchaser is proportionally benefited.

I am pleased to find myself in regard to this second method of solution in entire accordance with Mr. Hoskold, who has largely attended to the subject; and whose remarks on pp. 26 to 28 I commend to careful consideration.

P. GRAY.

London: June 11, 1877.



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CONSTRUCTION AND USE OF VALUATION TABLES,

WITH

RULES AND FORMULÆ.

EVERY beneficial interest or sum of money accruing, or to accrue, and to be paid at the end of a year, or portion of a year, may be considered as an annuity, and may be either terminable with the life of an individual or perpetual. Any sum of money left unpaid for a certain number of years is called an annuity in arrear, and when not payable until after a fixed number of years it is said to be a reversionary or deferred annuity.

In either case the annuity is transferable, and may be purchased on certain agreed terms; each class of annuities must, however, receive a particular mode of treatment, adapted to, and peculiar to the nature of the circumstances connected with each particular case.

If money could not be employed, and a marketable rate of interest obtained for its use, the value of any sum of money or annuity would be equal to that to be paid at the end of one year, multiplied by the whole period or number of years the annuity has to run; but as compound interest is involved in all these cases, it is clear that if A desires to sell an annuity to B, and which has to last a certain number of years, a certain agreed interest or discount must be allowed to B upon the whole sum to be purchased, and received by him for the fixed period.

The Increase of the Principal at compound interest may be illustrated by the following mode of expression:—

Putting r =interest on £1 for one year or other integral period,

 $R = \text{amount of } \mathcal{L}_{I} \text{ with one year's interest,}$

n =any integral number of years,

then

(I) . .
$$R^n = (I + r)^n$$
.

Supposing the rate of interest to be 3 per cent., then r = .03 and R = 1 + .03 = 1.03 = the principal of £1, and simple interest on it at the above rate for one year. If improved in a similar manner during the second year, it would amount to $(1 + .03)^2$ or = 1.0609, and so on until $(1 + .03)^{100}$ would amount to 19.2186319809.

In words, the rule may be thus expressed, Add to unity or I the interest due upon it at the end of the first year; involve the sum, to the power whose index is the number representing each successive year in the given period.

It is manifest that the present value of £1, at 3 per cent., must be such a sum less than £1 as would, if improved by a year's interest, amount to it. Thus the principal of £1, and interest, $\cdot 03$, thereon = £1.03, the amount; and $\frac{1}{1.03}$ =

'9708738, the present value of £1. For, '9708738 \times 1'03 = £1. Similarly, the present value of £1, due 6 years hence, at

3 per cent., would be
$$=\frac{1}{1.194052}$$
 = .837484. It therefore

follows that if £1 is raised to any amount resulting as shown from its improvement at compound interest, at a certain rate per cent., during any number of years, and unity or 1 is divided by it, the resulting number or quotient will represent the present value of £1, due at the end of the same periods the amounts were raised for. The value or years' purchase of perpetuities may be found by dividing the annuity by the rate of interest on £1 for one year. Thus $\frac{1}{3} = 33 \cdot 33333$, $\frac{1}{4} = 25$, $\frac{1}{5} = 20$, $\frac{1}{7} = 14 \cdot 2857$, and $\frac{1}{10} = 10$ years' purchase respectively.

The Present Value of a Perpetuity of £1 payable once in every nth year, the first payment due n years hence, will be denoted by V_n ; thus we have,

$$(2) . . V_n = \frac{1}{R^n - 1}.$$

And, for the value of such a perpetuity payable every 10 years, at 4 per cent. we have,

$$V_{10} = \frac{I}{R^{10} - I} = \frac{I}{I \cdot 48024 - I} = 2 \cdot 0823.$$

The present value of £1 to be paid annually in perpetuity at 4 per cent. is, as stated above, = 25 years' purchase; but if, instead of being annual, the payments are only made at intervals of say 2, 3, or 4 years, or other periods, by taking the amount of R^n from the Tables for the variable periods, the formula $V_n = \frac{1}{R^n - 1}$ will of course continually represent the present value of the perpetuity.

If the perpetuity is deferred for say 5 years, so that the first payment is to be made 15 years hence, the value found as above must be multiplied by v^5 ; and if the perpetuity is anticipated 5 years, the value found must be multiplied by R^5 .

In the former case v^5 being '82192711, we have

$$2.0823 \times .82192711 = 1.71149882$$
;

and in the latter case R^5 being 1.21665290, we also have $2.0823 \times 1.21665290 = 2.53344909$, the value of the perpetuity.

Again, putting s_n = redemption fund, we also have

(3) . . .
$$V_n = \frac{8_n}{r}$$
.
Thus $\frac{.083292}{.04} = 2.0823$, as before.

Also, the Present Value of a Perpetuity of \pounds_{I} , deferred n years, may be deduced as follows:—

Putting D = deferred value, ,, $v^n =$ value of £1 due n years hence,

we have

$$(4) \quad . \qquad . \qquad D = \frac{v^n}{r}.$$

Thus $\frac{.6756}{.04} = 16.8891$, value at 4 per cent. for 10 years.

Also
$$\frac{100}{04} = 25$$
,

and $.6756 \times 25 = 16.8891$, the value deferred as before.

When large sums are invested at compound interest, a certain advantage would accrue to an investor if interest on capital were to be paid at several equal intervals during the year, instead of one single payment at the end of the year.

It does not come within the scope of this work to enter into a theoretical investigation of the subject, but the practical mode generally adopted in solving problems of this nature may be exemplified as follows:—

If interest were to be realised m times in a year, at the rate $\frac{r}{m}$, the expression becomes

(5) . .
$$\left(1+\frac{r}{m}\right)^{mn}$$
.

Assuming the principal to be £1, and r = 006 per £1 for one year, for half-yearly payments we have

$$\left(1 + \frac{.06}{2}\right)^2 = 1.0609.$$

Payments being made quarterly, we also have

$$\left(1 + \frac{.06}{4}\right)^4 = 1.0613635505.$$

By the same rule, for monthly payments the amount would be 1.06167781, and for weekly payments it would be 1.06179981.

On the same principle, if it were possible for payments to be made momentarily, the amount of all the increments would depend upon, and be expressed by, the well-known principle of the 'Binomial Theorem,' and if the series are continued to a sufficient extent, would = 2.718281828459, which is the base of the *Napierian* logarithms. The log of this number is 0.434294481903, and $0.06 \times 0.434294481903 = 0.02605766891418$, the natural number of which is 1.061836546557, or the amount.

Thus, it is evident from the nature of the above formula, that if payments were made on the assumption that a year could be divided into an indefinite number of periods, the resulting amount of all the increments, at the end of the year, would, according to this hypothesis, be in excess of that derived from the employment of periods of time having greater duration, as a day, week, or month, &c., &c.

The amount of £1 per Annum, if invested and improved at compound interest, in n years, may be determined by the following expression:—

Let $r = \text{interest on } \mathcal{L}_{I} \text{ per annum.}$

,, $M_n = \text{amount of } \mathcal{L}_1 \text{ per annum for } n \text{ years.}$

,,
$$R = (1 + r)$$
, as in last case,

then

$$(6) . . M_n = \frac{R^n - 1}{r}.$$

Assuming the rate of interest to be 3 per cent., then

$$M_1 = \frac{R - 1}{03} = £1$$

for the first year's amount, and if improved for the second year,

$$\frac{R-1}{.03} = \frac{1.0609 - 1}{.03} = 2.03;$$

and so on, until

$$\frac{19.2186319809 - 1}{0.03} = 607.28773269,$$

the amount at the end of 100 years.

In words the rule is thus expressed:—Deduct unity or 1 from the amount of £1 in n years, and divide the remainder by the rate per £1.

The amounts may also be found thus:—Multiply the first year's amount, i.e., $I \times I \cdot 03 + I = 2 \cdot 03$, the second year's amount; then $2 \cdot 03 \times I \cdot 03 + I = 3 \cdot 0909$, the third year's amount. The same results will be obtained by adding the amount of £I in n years, i.e., R^n , to the amount of £I per annum in n years, or M_n ; thus $I + I \cdot 03 = 2 \cdot 03$, then $2 \cdot 03 + I \cdot 0609 = 3 \cdot 0909$, the third year's amount.

When interest can be realised m times in a year, the expression becomes

(6a) .
$$M_n = \frac{\left(1 + \frac{r}{m}\right)^{mn} - 1}{\frac{r}{m}}.$$

Therefore, for half-yearly payments, the interest being at the rate of 4 per cent. per annum, for 10 years, we have

$$M_{10} = \frac{\left(1 + \frac{.04}{2}\right)^{20} - 1}{.04} = 12.1486848994.$$

And for quarterly payments we also have

$$M_{10} = \frac{\left(1 + \frac{.04}{4}\right)^{40} - 1}{\frac{.04}{4}} = 12.221593339.$$

The Present Value of £1, due n years hence, may be determined from the following data:—

Putting v^n = present value of £1 due n years hence, ,, $R^n = (1 + r)^n$ as before,

(7) . . . then
$$v^n = \frac{\mathbf{I}}{R^n}$$
.

Supposing 5 per cent. to be the rate of interest, we have

$$v = \frac{I}{R} = \frac{I}{I \cdot 05} = .9523809523,$$

the first year's present value, and the 6th year's present value would be equal to

$$\frac{1}{1\cdot 3\dot{4}0095641} = .7462153964.$$

In words the rule may be thus expressed:-

Divide unity or 1 by the amount of £1 in n years; the quotient will then represent the present value of £1 due at the end of n years.

The same results may also be obtained by first dividing unity or I by the amount of £I in one year, and afterwards to constantly divide the successive quotients by the same amount.

Thus
$$\frac{I}{I \cdot 05} = .9523809523$$
;
then $\frac{.9523809523}{I \cdot 05} = .9070294784$.

the second year's present value.

If it were possible to realise interest m times in a year, the expression becomes

$$(7a) . vn = \frac{1}{\left(1 + \frac{r}{m}\right)^{mn}}.$$

Therefore, for half-yearly payments, at 4 per cent., and for 5 years, we have

$$v^{5} = \frac{1}{\left(1 + \frac{.04}{2}\right)^{10}} = .8203483,$$

and for quarterly payments we also have

$$v^5 = \frac{1}{\left(1 + \frac{.04}{4}\right)^{20}} = .8195444.$$

The Redemption Fund that will amount to \mathcal{L}_{I} in n years may be computed from the following expression:—

Putting s_n = redemption fund,

,, R^n and r = the elements as previously assigned, then

$$(8) s_n = \frac{r}{R^n - 1}$$

Allowing the rate of interest to be 3 per cent., and to redeem £1 at the end of 3 years, we have

$$s_3 = \frac{.03}{R^3 - 1} = \frac{.03}{1.002727 - 1} = .3235303633,$$

or the redemption fund; and for redemption in 20 years we also have

$$s_{20}^{\cdot} = \frac{.03}{1.8061112347 - 1} = .0372157076.$$

The rule for finding the redemption fund may be written in words thus:—

Divide the rate of interest per £1 by 1 less than the amount of £1 in the time.

Assuming interest to be convertible m times in a year, the expression becomes

$$(8a) . . s_n = \frac{r}{\left(1 + \frac{r}{m}\right)^{mn} - 1}.$$

Therefore, for half-yearly payments, at 4 per cent., and for 10 years, we have

$$s_{10} = \frac{.04}{\left(1 + \frac{.04}{2}\right)^{20} - 1} = \frac{.04}{1.485947396 - 1} = .08231343;$$

and for quarterly payments we also have

$$s_{10} = \frac{0.04}{\left(1 + \frac{0.04}{4}\right)^{40} - 1} = \frac{0.04}{1.4888637336 - 1} = 0.08182239,$$

the redemption fund.

We may also deduce similar results from

$$(9) \quad . \qquad . \qquad . \quad s_n = \frac{\mathbf{I}}{M_n}.$$

 ${f Thus}$

$$s_n = \frac{I}{12.221593} = .08182239$$
, the redemption fund, as before.

It may be remarked here, that for very nice work, i.e., to make the simple interest at a certain rate per cent. on the deduced value and redemption fund balance the annuity exactly, it is necessary to employ a table computed to eight or ten places of decimals.

Putting A = the Immediate Annuity which £1 will purchase, we have

$$(9a) A = s_n + r'.$$

The annuity is therefore readily obtained by adding to the redemption fund necessary to produce £1 at the end of any given period the interest allowed upon the investment.

Thus, the redemption fund necessary to produce £1 at the end of 3 years, at 3 per cent. = 3235303633; then, the interest allowed on the investment being 3 per cent., we have,

$$3235303633 + 303 = 3535303633$$

or the annuity. This rule applies to all percentages; for, assuming the interest to be allowed on the outlay to be '20 per \pounds instead of '03 per \pounds , for a period of 40 years' duration, we have the redemption fund necessary to produce \pounds 1 at the end of the assigned period = '01326238; then

$$.01326238 + .20 = .21326238,$$

or the annuity which £1 will purchase.

Table V is therefore well adapted for determining the annuity, without having a special Table for that purpose.

The Present Value of £1 per Annum, deduced by the old rule for n years, may be computed as follows:—

(10) . Present value
$$p_n = \frac{R^n - 1}{R^n r}$$
 or $\frac{1 - v^n}{r}$.

Assuming the rate of interest to be 3 per cent. per annum for 5 years, we have

$$\frac{1 - .8626087846}{.03} = 4.57970719$$
, the present value.

The value deduced by either of the last preceding rules is erroneous, when it is necessary to employ rates of interest above those which can be realised in the money market for the redemption of capital. See Table XII for discrepancies in the old table of present values.

The Present Value of £1 per Annum for n years, allowing to a purchaser of annuities one rate of interest on his purchasemoney, and to redeem his capital at the expiration of the time by annually investing the overplus at another practicable rate, may be deduced as follows:—

Putting P_n = present value, ,, R, s_n , and r = the elements as previously assigned, and r' = the interest allowed on capital,

we have

(II).
$$P_n = \frac{1}{\frac{r}{R^n - 1} + r'} \text{ or } \frac{1}{r' + s_n}$$

Assuming the rate of interest on capital to be 5 per cent., and to redeem it at 3 per cent., at the expiration of 3 years, we have

$$\frac{1}{3235303633 + 05} = \frac{1}{3735303633} = 2.677158534.$$

Assuming interest to be convertible m times in a year, the expression becomes

(IIa) .
$$P_{n} = \frac{I}{\left(\frac{r}{I + \frac{r}{m}\right)^{mn} - I} + r'}.$$

Therefore, for half-yearly payments, interest on capital being 10 per cent., and redemption 4 per cent., and for 10 years, we have

$$P_{10} = \frac{I}{\frac{\text{O4}}{(I + \frac{\text{O4}}{2})^{20} - I}} = \frac{I}{\frac{\text{O4}}{I \cdot 485947396 - I}} + \text{IO}$$

and for quarterly payments we also have

$$P_{10} = \frac{I}{\underbrace{(I + \frac{O4}{4})^{40} - I}} = \frac{I}{\underbrace{I \cdot 4888637336 - I}} = 5.499842456,$$

the present value.

It will be observed that the purchase-money being P_n , it is evident from $\frac{1}{r'+s_n} = P_n$, that the interest r' allowed or expected to be realised for investing a sum P_n would be equal to P_n , r', and s_n , invested at another rate per cent., r, which being accumulated at compound interest, will reproduce the original capital P_n at the expiration of a certain defined period.

The annuity being unity or £1, is consequently made up of two distinct parts, that is, r' per cent., a year's interest on P_n , and s_n , which being invested at another rate of interest per cent., r per annum, will produce P_n .

The annuity of £1 is therefore equal to $r' + s_n$, which may probably be more clearly seen by the following mode of working:—

Putting the period of duration, n, of the annuity \implies 55 years

the period of 55 years)

the rate of interest
$$r'$$
 to be realised on the purchase-money P_n

then from (11) we have

$$P_n = \frac{\mathbf{I}}{\frac{r}{R^n - \mathbf{I}} + r'}$$

Also
$$R^n = R^{55} = 5.082148592$$
,
and $P_{55} = \frac{I}{\frac{.03}{R^{55} - I} + .20} = \frac{I}{\frac{.03}{5.082148592 - I} + .20}$

$$= \frac{I}{.00734907104 + .20} = \frac{I}{.2073497104} = 4.82278505$$
, or

present value.

To insure, therefore, the purchase of an immediate annuity of £1 under these conditions, the purchaser must pay down a sum of £4.82278505 = P_{55} , the present value, or years' purchase.

Again, s_{s5} at r per cent. = s_{55} at 03 = 00734907104, which is the redemption fund necessary to reproduce £1 in the given time:—

Then
$$P_{55}r'=4.82278505\times \cdot 20$$
 . . = '9645570100 And $P_{55}s_{55}=4.82278505\times \cdot 00734907104= \cdot 0354429898$ Also $r'+s_{55}=$ the annuity receivable, or $\pounds 1.000000000$

If, therefore, £0354429899 is annually invested at the rate of 03 per cent. compound interest, it will reproduce P_{55} , the original purchase-money, or capital, at the expiration of the term of 55 years.

Thus the amount of £1 per annum for 55 years = 136.0716197, which, multiplied by £.0354429899 = £4.82278505, the original capital, or P_{55} .

What has been hitherto advanced relates more particularly to formulæ, and rules, employed in the construction of the Tables necessary for determining the present value of immediate and deferred annuities, realised under certain conditions; but when annuities are deferred, and the present value required to be tabulated, special treatment must be adopted; and the construction of Tables of this nature becomes very tedious.

In calculating the Tables in this work of the present value of £1 per annum for n years after t years, allowing a purchaser interest on his purchase-money at a certain agreed rate per cent., also such a surplus as, invested at another practicable rate per cent., would reinstate the capital at the end of the term, the following conditions were necessary to be considered.

If instead of an annuity of p pounds being entered upon immediately, it can only be realised at the end of the t-th year, and to continue n years thereafter, the purchaser will expect to realise r' per cent. on his outlay P_{t+n} , during the whole term of t+n years; and here, as was shown in the last preceding case, he can invest the surplus annuity only at the rate of r per cent.

It is necessary, therefore, to determine the relation existing between P_{t+n} and p, and, as it may be seen that no annuity can be paid during the deferred term of t years, P_{t+n} would accumulate or amount at the end of the t-th year to P_{t+n} $(1+r')^t$. When, however, the annuity is entered upon, which as a matter of course it would be at the end of the t-th year, it is, as previously shown, separable into two parts, that is to say, first, a year's interest on the amount which the purchase-money P_{t+n} has now attained, namely, $P_{t+n}r'$ $(1+r')^t$; and, secondly, $p-P_{t+n}r'$ $(1+r')^t$, the sum which must be invested at the rate of r per cent., and which will reproduce P_{t+n} $(1+r')^t$ at the end of t+n years. Then, by condition, we have,

$$\{p - P_{t+n} r' (1 + r')^t\} M_n = P_{t+n} (1 + r')^t.$$

Solution of this equation gives

(12) .
$$P_{t+n} = \frac{p M_n}{(1+r')^t (1+r'M_n)}$$
, and

(13) .
$$p = \frac{P_{t+n} (1 + r')^t (1 + r'M_n)}{M_n};$$

in both of which M_n denotes the amount of an annuity of £1 in n years.

If in (12) p be put = 1, we have for the value (the years' purchase), when the annuity is £1,

(14) .
$$P_{t+n} = \frac{M_n}{(1+r')!(1+r'M_n)};$$

and if the value, *i.e.*, the sum invested, be £1, we have from (13) by making $P_{t+n} = 1$, the annuity which £1 will purchase, viz.:—

(15) .
$$p = \frac{(1 + r')^{t}(1 - r'M_n)}{M_n}$$
.

The value of an annuity to continue 55 years after 3 years deferrence, r' being = 20, and r = 03, may be deduced from (14).

Thus,

$$P_{3+55} = \frac{M_{55}}{(1 + 20)^3 (1 + 20M_{55})}$$

Table (III) gives $M_{55} = 136$:07161972, at 3 per cent. Therefore,

$$P_{3+55} = \frac{136.07161972}{1.728(1+20\times136.07161972)} = \frac{136.07161972}{48.75435056} =$$

2.7909633636, value of deferment required. Again, if the purchase-money P_{t+n} is made = £1 for the same continuance and period of deferment, and at the same rates, the annuity £1 will purchase may be deduced from (13):—

Thus,

$$p = \frac{(1 + .20)^{3}(1 + .20 M_{55})}{M_{55}};$$

and by substituting the numerical quantities we have

$$p = \frac{1.728(1 + .20 \times 136.07161972)}{136.07161972} = \frac{48.75435056}{136.07161972} =$$

'3582991858, or the annuity deferred which £1 will purchase; and it is, as it ought to be, the reciprocal of the value, when the annuity is £1.

For,
$$p = \frac{\mathbf{I}}{P_{t+n}}$$
,

thus:-

$$\frac{1}{2.790963636} = .3582991858,$$

the deferred annuity which £1 will purchase, as before.

The value of the annuity, when deferred, may be readily derived from the value when immediate, by virtue of the following relation,

$$P_{t+n} = P_n v^t,$$

where n is the term of continuance, and t the term of deferment. Applying this to the last example, we have,

$$P_{3+55} = P_{55} v^3.$$

 P_{55} is = £4.82278505, and v^3 (at 20 per £1) is = £.57870370. (See Table IV.) Hence,

 $P_{3+55} = 4.82278505 \times .57870370 = 2.790963636$, the same as before.

In order to illustrate the power of the Tables, and to give an additional method of obtaining the deferred value, we have,

(16) .
$$P_{t+n} = \frac{1}{(1+r')^{t}-1} + r' + s_{n}$$

Then, by substitution, we also have,

$$P_{i+n} = \frac{1}{(1+20)^3 - 1} + 20 + 00734907 = \frac{1}{3582991937} = \frac{1}{358299197} = \frac{1}{358299197} = \frac{1}{358299197} = \frac{1}{$$

2 790963578, or value of deferrence, practically the same as above.

There is nothing in the amount of work involved in this method to frighten a student—on the contrary, I consider it simpler than when employing M_n . But for practical purposes, and in order to get over a larger amount of calculation in a given time, no doubt $P_n v^t$ should be employed, which is the simplest possible form the formula can be made to assume. Tables X and XI were computed by this rule.

Again, for obtaining the deferred annuity which £1 will purchase, we have the following expression:—

(17) .
$$p = \frac{(1+r')^t - 1}{P_n} + r' + s_n$$
. Or,

$$p = \frac{(1+20)^3 - 1}{4.822785051} + 20 + 00734907 = 3582991937.$$

It may be here remarked that it is not necessary in practice to work up any of the elements involved in the solution of these problems, as they are tabulated in this work, and may be immediately obtained by reference.

It is to be observed that when working the numerical quantities represented by the formulæ, (14), (15), the operation should be taken from right to left, thus:—

$$M_n \times r' + I \times (I + r')^t$$

i.e., $136.07161972 \times .20 + 1 \times 1.728$.

If t is made equal to 0, that is to say, if the annuity can be made available on present entry, then $(1 + r')^t = 1$, and the formula deduced becomes for this case

(18) . .
$$P_n = \frac{pM_n}{1 + r'M_n}$$
;

(19) . also
$$p = P_n \frac{(1 + r' M_n)}{M_n}$$
.

Putting p therefore = £1, we have from (18),

$$P_n = \frac{M_n}{1 + r' M_n};$$

and by substituting the numerical quantities we also have

$$P_{55} = \frac{136.0716197}{1 + (.20 \times 136.0716197)} = \frac{136.0716197}{28.21432394} = 4.822785051,$$

which is the present value, or years' purchase immediate.

Again, putting $P_n = \mathcal{L}_1$, we also have from (19),

$$p=\frac{1+r'M_n}{M_n};$$

and by substitution we also have

$$p = \frac{1 + (.20 \times 136.0716197)}{136.0716197} = \frac{28.21432394}{136.0716197} = .20734907104,$$

which is equal to the redemption fund necessary to produce \mathcal{L}_{I} in the given time, plus the interest allowed to a present purchaser. See (9a), page 8.

The results deduced from the last two preceding formulæ for immediate annuities prove the accuracy of the plan upon which the Tables of this class have been computed for this work.

The subject of *Deferred Annuities* has been considered by some to be very complicated, and by many avoided altogether—when two rates of interest are involved—as something unapproachable. The great difference of opinion that exists in relation to the proper mode of treating the question as applied to Mines has led me to investigate it thoroughly, and I believe the conclusions arrived at are such as are not to be controverted.

The resulting number deduced from (14) and (16), that

is to say 2.790963578, is the sum necessary to be paid down by a present purchaser in order to secure an annuity of £1 for 55 years (which is not to commence, however, until the expiration of 3 years), which would yield him 20 per cent. during the entire period of 58 years, and redeem the purchase-money, that is to say £2.790963578, and its amount during the 3 years of deferment, together equal to £4.822785051, by investing the surplus annuity at 3 per cent. compound interest.

Again, under similar conditions, if, instead of £2.790963578, one pound only had been invested, then an annuity of £3582991858 would have been secured by the purchaser. Generally, therefore, in cases of deferred annuities of this kind that is, when two rates of interest are involved—a certain sum, P_{t+n} , has to be paid down immediately; but as no annuity is or can be payable under the circumstances during the deferred period, the purchase-money, P_{t+n} , accumulates at the rate allowed to the purchaser on his capital, or r' per \mathcal{L} , to a certain sum = P_{t+n} (1+r')^t= P_n ; but, at the expiration of t years, the deferred period closes, and the annuity commences or is then entered upon, and its payments have to yield interest at the rate agreed upon between the parties to the business, or r' per \mathcal{L} on the accumulated purchase-money $P_n = P_{t+n} (1+r')^t$, and also a sum sufficient to reinstate the sum P_n to which the purchase-money has accumulated at the end of the assigned term of t+n years, at another rate per \mathcal{L} , or r. In the present case the deferred period t is equal to 3 years, and the term n to run afterwards is equal to 55 years.

Then,

$$P_{t+n} (1+r')^t = P_{t+n} (1+20)^3 = P_{t+n} \times 1.728 = £2.790963578 \times 1.728 = £4.822785051 = P_n,$$

the amount to which the purchase-money has accumulated at 20 per cent. at the end of the deferred period.

The interest on $P_n = P_n r' = 4.822715051 \times .20$ = £.964557010, or that part of the annuity due to the agreed percentage. P_{t+n} being the present gross value to be paid down = £2.790963578, and the redemption fund required to produce £1 at the expiration of 55 years at 3 per cent. is equal to £.007349071.

Then,

$$P_n s_n$$
 at r per cent. = $P_n \times .007349071 = £4.822785051 $\times .007349071 = £.03544299$,$

the amount necessary to be annually set aside and to accumulate at 3 per cent. for the assigned term of n years.

```
Also the interest on P_n, or P_n r', plus that on P_n s_n at r per cent., is equal to P_n \times 20 = 10 to that portion of the annuity enjoyed for present use . . = 964557010 And P_n s_n at r per cent. = the other part set aside for redemption within the period . . . . . . . = 035442990 And P_n r' + P_n s_n at r per 2 . . . = 210000000000
```

or the annuity to be received by the purchaser under the proposed conditions.

If further proof of the accuracy of the foregoing mode of working were required, it is only necessary to multiply the amount of an annuity of £1 in 55 years at 3 per cent. by the surplus annuity set aside to reproduce the capital at the expiration of the given time.

Thus, the amount of £1 per annum for
$$n$$
 or 55 years = 136.0716197 × £03544299 = £4.822785051,

the original capital invested, with accumulated interest.

When the sum invested is £1, the annuity purchased, as previously shown, is equal to £.3582991858, and if treated as above, $P_{t+n}(1+r')^t = £1(1+20)^3 = 1.728 = P_n$, the accumulated amount during the deferred period of 3 years;

Then
$$1.728 \times .20$$
 . . . = .3456000
And $\pounds P_n = \pounds 1.728 \times .0073490$. = .0126991
 $\pounds .3582991$

the annuity as previously determined.

Then, if we multiply the amount of an annuity of £1 as before, we have $13607161970 \times 00734907104 = £1$, the original capital, or purchase-money paid down.

If further proof of the principle involved in the return of the capital were required, we may select an example embracing a short duration, and proceed in detail as follows: The present value of £1 per annum, allowing 20 per cent. and to reproduce it at 3 per cent. within a period of 5 years after 3 years = £1.490142634, which accumulates to £2.574966472 in 3 years.

```
The redemption fund to produce this
     sum is.
                                     = .485006705689
   And £2.574966472 \times .20 .
                                = .514993294311
             The annuity . . \pounds_{1} . \pounds_{2}
And in detail thus:-
          485006705689 = 1st year's redemption fund.
                    30'I inverted.
          .485006705689
           14550201170
          499556906859 = amount at end of 1st year.
          \cdot485006705689 = 2nd year's redemption fund.
          984563612548
                    30'I inverted.
          984563612548
           29536908376
         1.014100520924 = amount at end of 2nd year.
          485006705689 = 3rd year's redemption fund.
         1.499107226613
                    30'1 inverted.
         1.499107226613
           44973216798
         1.544080443411 = amount at end of 3rd year.
          \cdot 485006705698 = 4th year's redemption fund.
         2.029087149100
                    30'1 inverted.
         2.029087149100
           60872614473
         2.089959763573 = amount at end of 4th year.
          485006705689 = 5th and last year's redemp. fund.
         2.574966469262 = the accumulated present value.
```

The first year's redemption fund to be invested . . . = £.485006706689, And at 3 per cent., at the end of the year becomes . . = £.499546906859. The second instalment of the redemption fund . . . = £.485006705689, Is again invested, and at the end of the second year the fund is = £1.014100520924,

to which, at the end of the third year, £485006705689 is again added, and so on to the end of the fifth year, when the original purchase-money, £1.490142634, and its accumulation during the deferred period, by multiplying it by

$$(1 + r')^5 = 1.728 = £2.574966470.$$

Care must, however, be taken that no delay is occasioned in investing the annual instalment at the proper time, otherwise a discrepancy will exist in the account at the end of the period.

The Tables introduced into this work have been carefully calculated from data deduced from first principles, and involved in the doctrine of interest and annuities. The formulæ and rules which were employed in their construction are laid down in the most simple form, so as to be readily understood, and applied by those who may not have either time or inclination to investigate, and employ rules containing algebraical combinations of a more complicated nature. I have strenuously endeavoured to divest the subject of all intricate formulæ and elaborate mathematical reasoning, that would, in my opinion, tend in any way to confuse it. I trust, therefore, that this has been effected so far as it was considered to be convenient and beneficial, and consistent with the nature of the inquiry. presumed that any person having occasion for calculations of this nature may, by merely consulting the Tables, obtain at sight any years' purchase for a given time and rate of interest, and consequently arrive at a reliable conclusion as to the value of any annuity in a much more satisfactory manner, in less time, and with greater ease than could be expected to result from a tedious process of direct calculation. The same remark applies to all the other Tables.

Those who are sufficiently expert, and object to the use of tables as labour savers, will find that the rules laid down are sufficient for the calculation of values in a specific and direct manner, or for the production of tables similar to those I have referred to.

Inaccurate tables are worse than useless, and without employing some special means for the correction of error, it certainly could not be expected that tables involving so many figures and direct computations could be entirely free. Considering this, therefore, and being aware from long experience of the trouble and difficulties that are created by the employment of incorrect tables of various kinds, I was led to adopt means to the end in view. I have, therefore, every reason to believe that the result is, Tables free from error, and which may absolutely be relied upon.

With regard to the Tables of Amounts, an additional test as to the accuracy was applied to the final number in the column of each rate per cent. The mode of calculating an extreme number by a logarithmic process in a series having no ratio will be fully illustrated in another portion of the work.

Tables of the value of leases and annuities have frequently been published: that of Mr. Ward was written as far back as 1710; but Mr. Smart's celebrated five Tables of Compound Interest, which appeared in 1726, far excelled all that had been done previously to that time: indeed, his tables have been incorporated more or less into the works of many writers to the present time.

The tables specially referred to are—

- 1. The amount of £1 in any number of years.
- 2. The present value of \pounds I due at the end of any number of years.
- 3. The amount of \mathcal{L}_{I} per annum for any number of years.
- 4. The present value of £1 per annum for any number of years.
- 5. The annuity which £1 will purchase for any number of years.

None of the tables of this class that I have seen (and I have examined a large number of works upon the subject), are computed to rates of interest higher than 10 per cent., and many of them extend only to 5 per cent.

The fourth and fifth tables, previously described, must necessarily be inaccurate for rates of interest higher than

from $4\frac{1}{2}$ to 5 per cent. This will be fully demonstrated further on.

Tables I, II, and III of the Amounts in this work were originally calculated to 15 decimal places, with a view to print them to 10 places; but on account of the great expense of publishing, I determined to reduce all the other Tables to their present condition. The ordinary table of the present value of £1 per annum is the same in the works of all writers upon annuities; and, as the basis upon which it has been computed is in error, it follows that the annuity which £1 will purchase is also in error, because the latter is dependent for its formation upon the former. That is, p_n being the present value, and A = the annuity \mathcal{L}_{I} will purchase, we have $A = \frac{I}{p_n}$. Thus for 60 years at 10 per cent., in the old table, $p_n = 9.967157$; and $\frac{1}{9.967157} = .1003295122$, or the annuity. For the same period of time, and rate per cent., but redeeming capital at the rate of 3 per cent., $P_n = 9.42214381$. Also, we have $A = \frac{I}{P_n} = \frac{I}{9.42214381} = .1061329587$, or the annuity. Thus it is evident that the years' purchase upon the old basis is in excess of the truth, whilst the annuity which £1 will purchase,

derived from it, is in defect.

The reverse is the case in the Tables calculated for this work. For 9.967156 - 9.42214381 = .54504319, the difference in excess of a year's purchase; and 1061329587 - 1003295122 =.0057034465, the difference in defect.

The rate of interest allowed to a purchaser of mineral property, such as Collieries, Iron Mines, and others, frequently ranges between 10 and 25 per cent., but more generally between 14 and 20 per cent., depending of course upon the character of the property. It is evident, therefore, that tables calculated for rates of interest no higher than 8 or 10 per cent., and to 2 or 3 places of decimals, could not be employed for ascertaining the true value of annuities derived, or to be derived, from high rates.

It is stated on page 2 of all the editions of 'Inwood's Tables of Annuities' that I have seen—that is to say, those published

from 1837 to 1866—that 'A lease or annuity for 14 years, to make 3 per cent. and get back the principal, is worth 11.296 years' purchase of the clear annual rent,' and this rule is repeated as a footnote as far as page 9, as being true for all the rates of interest up to 10 per cent. The table goes no higher than 10 per cent., but it is identical with Mr. Smart's table—and that of all subsequent writers—of the present value of £1 per annum, for any number of years. This table, and others of its kind, to be found in most works on Annuities, is constructed correctly according to the mode laid down; but as that mode is based on incorrect principles, its application to the valuation of annuities, where interest is allowed at higher rates per cent. than can possibly be found for reproducing capital, is entirely fallacious, for the principle upon which it is based assumes that we can reproduce capital which may have been invested, at the same rate of interest as that allowed and expected to be realised on the purchase-money invested.

Taking 3 per cent. as interest to be realised on capital invested, and redeeming that capital at the same rate within 14 years, we have the redemption fund to reproduce the capital at 3 per cent. within 14 years = .05852634.

Then
$$.05852634 + .03 = .08852634$$
 and $\frac{1}{.08852634}$

=11.29607314 years' purchase, practically the same as in Inwood, and in all other writers on Annuities, but correct to more places of decimals.

Now, assuming a purchase was effected by allowing 20 per cent. instead of 3 per cent., and by the same rule also to recoup at 20 per cent., we have the redemption fund to recoup at 20 per cent. within 14 years = 0168930552.

Then
$$.0168930552 + .20 = .2168930552$$
 and $\frac{1}{.2168930552}$ = 4.610567171 years' purchase.

Suppose the annuity to be purchased equals £20,000, its present value, immediate, would be £4.610567171 \times 20,000 = £92211.34342.

Then 20 per cent. upon this sum =
$$18442 \cdot 268684$$

And £92211·34342 × '0168930552 = $1557 \cdot 731316$
The annuity . £20,000 **0**00000

It is, therefore, evident that if a purchaser were to invest £92211 34342 in purchasing an annuity of £20,000, derived from some mineral property, he could not invest annually in any funds so small a sum as £1557731315 for 14 years, that would yield him 20 per cent. It would, therefore, be impossible to realise or reproduce the original capital invested, within the time, under the circumstances.

Now, if we apply the proper rule, which is founded upon the principle that an investor realises a certain rate on his capital, and can reproduce that capital at another, but lower, and more practicable rate, we shall find that a serious discrepancy exists in the last preceding mode of ascertaining the value.

Taking 20 per cent. as interest to be realised on capital, and to redeem that capital within 14 years at 3 per cent. compound interest, we have the redemption fund necessary to replace £1 within the time = .058526339.

Then
$$.058526339 + .20 = .258526339$$
,
and $\frac{I}{.258526339} = 3.868077828$ years' purchase,

which is the true sum that must be given in order to secure £1 annuity for 14 years, allowing 20 per cent. upon it, and to replace it at 3 per cent. within the time.

To secure an annuity, therefore, of £20,000, there must be invested a sum equal to £77361.55656; and to get it back in 14 years at 3 per cent. an annual redemption fund of £4527.6887446 would be required to be set aside to accumulate at compound interest.

```
For 20 per cent. on 277361.55656 = 15472.31131
And 277361.55656 \times .058526339 = 4527.68869
The annuity as before 220000.00000
```

```
The present value obtained by Inwood's rule, and endorsed by many others (see pages 2 to 9 of his book) . . . . = 92211'34342

The present value found by correct method, viz. to realise at one rate per cent., and to redeem at another rate, say 3 per cent. . = 77361'55626

Difference . . . = £14849'78716
```

It is conclusive, therefore, that a present purchaser would be paying too much by £.742489358, in order to secure £1 annuity, or a total of £14849.78716.

For the difference between the incorrect and the true years' purchase

= £4.610567171 -
$$3.868077813$$
 = £.742489358,
and £.742489358 × 20000 = £14849.78716,

being the difference in error as before, or a loss of 74.2489 per cent. on the annuity purchased. (See Table XII.)

The practice, therefore, of valuing upon tables constructed on the assumption of reproducing capital at the same high rate of interest as that which may be realised on it is opposed to the truth, and calculated to mislead and injure a purchaser to a very large extent.

Thoman's definition is 'that the present value of a deferred annuity is equal to the difference between two immediate annuities of the same yearly income, one for the whole term, the other to continue until the time of entering on the deferred annuity.

This rule, however, embraces but one rate of interest in the present value of £1 per annum, but it has, I believe, been followed by all writers on Annuities, and by many valuers since Thoman's time. It is thus illustrated:—

Assuming the annuity to be deferred t years, and to continue n years afterwards, that is, say 55 years after 3 years, we have

```
The present value of 3 + 55 = 58 years
at 3 per cent. . . . = 27.33100549

The present value of 58 - 55 = 3 years
at 3 per cent. . . = 2.82861138
```

Present value deferred 3 years = £24.50239411

Now if we suppose the interest allowed on an investment is 20 per cent, and also to reproduce the capital at the same rate, employing the above rule, we have for a duration of 14 years after 3 years:

The present value of
$$3 + 14 = 17$$
 years at

20 per cent. . . . = 4.7746338

The present value of $17 - 14 = 3$ years at

20 per cent. . . . = 2.1064815

Present value deferred 3 years . =£2 6681523

But allowing a purchaser 20 per cent. upon his investment, and to reproduce the capital at 3 per cent., for a similar period, that is to say 14 years after 3 years, we have from (14),

$$P_{3+14} = \frac{M_{14}}{(1+r')^3(1+r'M_{14})}$$

Or,

$$\frac{17.08632416}{1.728 \times (1 + .20 \times 17.08632416)} = \frac{17.08632416}{7.63303363} = 2.238470965$$

years' purchase, or value deferred three years.

The deferred value by Thoman's or Inwood's rule = 2.668152300The deferred value by correct method . . = 2.238470965Difference = $\pounds.429681335$

A purchaser would, therefore, be paying too much for each £1 annuity, by £ 429681335, or 8s. 7d.; and if an annuity of £20,000 were purchased, the gross overpaid sum would amount to £8593 6267, or £8593 12s. $6\frac{1}{2}d$., or a total loss of 42 968 per cent. upon the annuity.

For
$$2.668152300 \times 20000 = 53363.0460$$

And $2.238470965 \times 20000 = 44769.4193$
Difference as before = £8593.6267

Again, taking another case under Thoman's and Inwood's rule, as generally adopted, and allowing 20 per cent. to a present purchaser, and to reproduce the capital at the same rate, we have for a duration of 55 years after 3 years:

The present value of £1 per annum for 58 years at 20 per cent. . . = 4.999872221 The present value of £1 per annum for 3 years at 20 per cent. . . . = 2.106481481 Present value deferred 3 years =£2.893390740

But, by allowing to the said purchaser 20 per cent. upon his investment, and to reproduce the capital at 3 per cent., the period of time being as in the last preceding case, or 55 years after 3 years, and adopting the correct rule for such a case, we have

$$\frac{136.07161972}{1.728 \times (1 + 20 \times 136.07161972)} = \frac{136.07161972}{48.75435056} = 2.790963639,$$

the correct value deferred.

The deferred value by Thoman's or Inwood's rule =
$$2.893390740$$
 The deferred value by correct method . . = 2.790963639 Difference = £\.\frac{102427101}{}

The difference, therefore, is equivalent to 2s. $0\frac{1}{2}d$. per £1, and, if as before, an annuity of £20,000 were purchased, the overpaid value or total loss would = £·102427101 × 20000 =£2048·54202; that is to say, every £1 annuity purchased under such conditions would cost too much by £·102427101, or 10·243 per cent.

It will be observed that throughout the problems where the condition was introduced that a certain sum was necessary to be expended upon open or unopened mines, with a view to obtain an estimated yield of minerals, and constant profit extending over a definite future period, the ordinary or customary mode of allowing 5 per cent. upon any such sum has been followed. It was considered advisable that this mode of solution should be fully exhibited, as it is believed to be good practice by some of the profession.

Others, however, entertain an opposite opinion, the nature of which will be best understood by putting a case. For this purpose, therefore, let us assume that a colliery is yielding a net income of £8,000 per annum, and that after careful consideration a valuer has estimated that to place the colliery in a position to yield a constant quantity of minerals extending over a period of 21 years, so that in all probability the income will be uniform for that period, the sum of £12,000 must be ex-

pended upon the works, during a period of 3 years, in equal sums of £4,000 each year. The interest to be allowed to a purchaser is 20 per cent. per annum, and the capital is to be redeemed at 3 per cent. per annum.

```
Under such conditions the present value
     of the colliery would be
                                          . = £34,061.13800
   The redemption fund to replace this gross
     value of £34,061·1380
                                                1,187.77239
   And interest on the gross value of
     £34,061.1380 \times 20 per cent. per annum =
                                                6,812.22761
           The proposed annuity
                                          . = £8,000.00000
Then, it is customary to say,
   From the gross value of the colliery
                                          . = 34,061.1380
   Must be deducted the estimated
     cost of works
                               .=£12,000
   And also interest thereon at
     the rate of 5 per cent. for
     3 years
                                    1,800
                                                13,800,0000
     Net present value of the colliery
                                              £20,261.1380
```

Now, it is held that the gross value of the colliery is made up of two parts, i.e., £22,061·1380 and £12,000; because these two sums together = £34,061·1380, or the gross value; also, that the purchaser, or party in possession, is receiving 20 per cent. per annum upon £22,061·1380, and upon £12,000, the latter sum being contained in and part of the gross value. Further, that the vendor receives a less sum for the colliery than the gross value, by the difference between that value and £12,000, or £20,261·1380; and, therefore, that the purchaser is not entitled to be allowed 5 per cent. for 3 years upon £12,000, nor indeed the full sum of £12,000, but only such a sum as would, if it were invested at 3 per cent., accumulate to £12,000 at the end of 3 years. According to this view, by Table (XIII), the present value of £4,000 per annum for 3 years, allowing interest at 3 per cent. per annum =£11,314·445.

The present value of the colviously stated	•	_	£34,061·1380
From which must be deducted	ed the pr	$\mathbf{e}\mathbf{sent}$	
value of £4,000 per annu	m for 3	years	
at 3 per cent. per annum		. =	11,314.4450
Present net value of the co	lliery ac	cord-	
ing to the new mode .		. =	£22,746.6930
Present net value of the	colliery	first	
deduced		. =	20,261.1380
Difference in value		. =	£2,485.5550

The difference between the values as found by the two modes is not large, but it is apparent that if the time over which the expenditure was distributed amounted to 8 or 10 years, the difference would be very considerable.

The preceding problem, representing a particular case in the valuation of mines, occurring at pp. 119, 120, and 121 of the first edition, has been referred to and discussed by the late Mr. Peter Gray at pp. xxi to xxiii in his 'Introductory Note,' and it is considered of sufficient importance to be retained in this edition.

TABLE I.

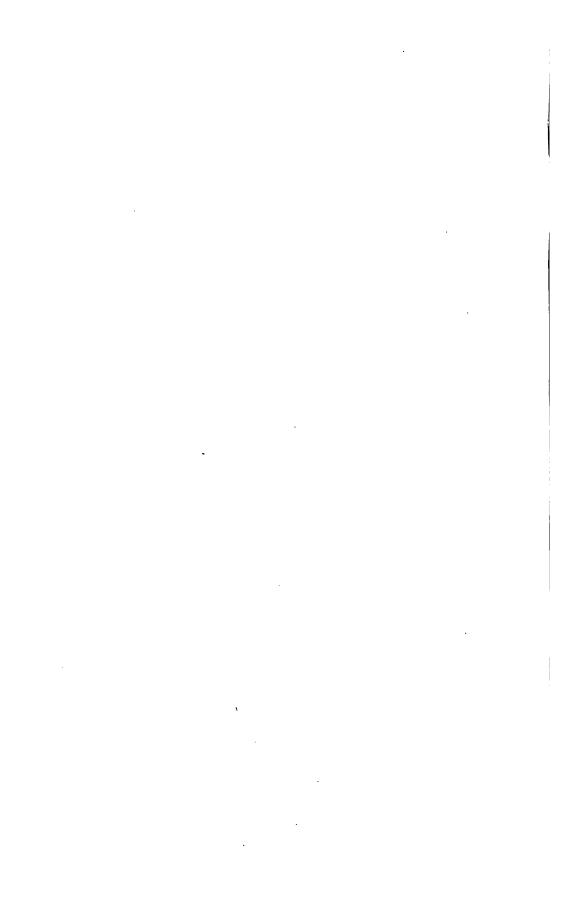


TABLE 1.

Amount of £1 in n years at the following rates per cent.

Years	½ per cent.	Years	½ per cent.	Years	‡ per cent.	Years	2 per cent.
I	1.002	51	1.2896419440	1	1.0022	51	1.4638541068
2	1.010022	52	1.2960901537	2	1.01505625	52	1.4748330126
3	1.012022122	53	1.3025706045	3	1.0226691719	53	1.4858942602
4	1.0201202006	54	1.3090834575	4	1.0303301002	54	1.4970384672
7	1.052515231	55	1.3156288748		1.0380667346	55	1.2082662222
5	1.0303775094	56	1.3222070192	5 6	1.042822321	33	1.2192282233
					10536961269		
7 8	r·0355293969	57	1.3288180543	7 8		57	1.5309750895
	1.0407070439	58	1.3354621446	4 1	1.0615988478	58	1.542457402
9	1.0459105791	59 60	1·3421394553 1·3488501526	10	1.0695608392 1.0775825455	59 60	1.5540258332
11	1.0r620r8227	61	112555044022	11	1.0856644146	61	117774226246
	1.0563958327	62	1.3555944033	41 L		1 . 1	1.5774236346
12	1.06167781		1.3623723753	12	1.0938068977	62	1.5892543119
13	1.0669862009	63	1.3691842372	13	1.1020104494	63	1.6011737192
14	1.0723211319	64	1.3760301584	14	1.1102755278	64	1.6131825221
15	1.0776827376	65	1.3829103092	15	1.1186025942	65	1.6252813911
16	1.0830211213	66	1.3898248607	16	1.1269921137	66	1.6374710015
17	1.0884865070	67	1.3967739850	17	1.1324442242	67	1 6497520340
18	1 0939289396	68	1.4037578550	18	1.1439603887	68	1.6621251743
19	1.00033085843	69	1.4107766442	19	1.1525400916	69	1.6745911131
20	1.1048955772	70	1.4178305275	20	1.1611841423	70	1.6871505464
21	1.1104200551	71	1.4249196801	21	1·1698930234	71	1.6998041755
22	1.1159721553	72	1.4320442785	22	1.1786672210	72	1.7125527068
23	1.151520161	73	1.4392044999	23	1.1875072252	73	1.7253968521
24	1.1271597762	74	1.4464005224	24	1.1964135294	74	1.7383373285
25	1.1327955751	75	1.4536325250	25	1.2053866309	75	1.7513748585
26	1.1384595530	76	1.4609006876	26	1.2144270306	76	1.7645101699
27	1.1441518507	77	1 4682051911	27	1.2235352333	77	1.7777439962
28	1.1498726100	78	1.4755462170	28	1.2327117476	78	1.7910770762
29	1.1226219730	79	1.4829239481	29	1.2419570857	79	1.8045101542
30	1.1614000829	80	1.4903385678	3.0	1.5112717638	80	1.8180439804
31	1.1672070833	81	1.4977902607	31	1.2606563021	81	1.8316793102
32	1.1730431187	82	1.5052792120	32	1.2701112243	82	1 8454169051
33	1.1789083343	83	1.5128056080	33	1.2796370585	83	1.8592575319
34	1.1848028760	84	1.5203696361	34	1.2892343364	84	1.8732019633
35	1.1907268904	85	1.5279714843	35	1.2989035940	85	1.8872509781
36	1.1966805248	86	1.5356113417	36	1.3086453709	86	1.9014053604
	1.2026639275	87	1.2432893984	37	1.3184602112	87	1.9156659006
37	1.50862273	88	1.5510058454	38	1.3283486628	88	1.9300333949
38		89	1.5587608746		1.3383112778	89	1.9445086453
39 40	1.2147206333	90	1.5665546790	39 10	1.3483486123	90	1.9590924602
41	1.2268982077	91	1.5743874524	41	1.3584612269	91	1.9737856536
42	1.2330326987	92	1.2822593896	42	1.3686496861	92	1.9885890460
	1.2391978622	93	1.2001706866	43	1.3789145588	93	2.0035034639
43	r.2453938515	93.	1.2081212400	44	1.3892564180	94	2.0182392398
44	1.2516208208	1 - 1	1.6061121477	45	1.3996758411	95	2.0336687129
45		95	1.6141427085	46	1.4101734099	96	2.0489212282
46	1.2578789249	96		11 . 1		1 ' 1	2.0642881379
47	1.2641683195	97	1.6222134220	47	1.4207497105	97	
48	1.2704891611	98	1.6303244891	48	1.43140533333	98	2.0797702985
49	1.2768416069	99	1.6384761116	49	1.4421408733	99	2.0953685757
50	1.2832258149	100	1.6466684921	50	1.4529569299	100	2.111083840

Years	1 per cent.	Years	1 per cent.	Years	1} per cent.	Years	1} per cent.
1	101	51	1.6610781401	1	1.0122	51	1.8842851532
2	1.0501	52	1.6776889215	2	1.02515625	52	1 9078387177
3	1.030301	53	1.6944658107	3	1.0379707031	53	1.9316867016
4	1.04060401	54	1.7114104688	4	1.0509453369	54	1.9558327854
	1 0510100501	55	1.7285245735	اخا	1.0640821536	55	1.9802806952
5	1.0615201506	56	1.7458098192	5	1.0773831805	56	2.0050342039
	1.0721353321	57	1.7632679174		1:0908504703		2.0300971315
7 8	1.0828567056	58	1.7809005966	7 8	1.1044861013	57 58	2.0554733456
9	1.0936852727	59	1.7987096025	9	1.1182921774	59	2.0811667624
10	1.1046231324	60	1.8166966986	10	1.1322708297	60	2.1071813470
11	1.1156683467	61	1.8348636655	11	1.1464242150	61	2.1335211138
12	1.1268220301	62	1.8532123022	12	1.1607545177	62	2.1601901272
13	1.1380932804	63	1.8717444252	13	1 1752639492	63	2.1871925043
14	1.1494742132	64	1.8904618695	14	1.1899547486	64	2.2145324106
15	1.1609689554	65	1 909 3664882	15	1.2048291829	65	2.2422140657
16	1.1725786449	66	1.9284601531	16	1.2198895477	66	2.2702417416
17	1.1843044314	67	1.9477447546	17	1.5351381670	67	2.2986197633
18	1.1061424222	68	1.9672222021	18	1.5202773941	68	2.3273525104
19	1.5081080204	69	1.9868944242	19	1.5665006116	69	2.3564444168
20	1.5501000300	70	2.0067633684	20	1.5850325311	70	2.3858999720
21	1.2323919403	71	2.0268310021	21	1.2980626971	71	2.4157237216
22	1 2447 1 58597	72	2.0470993131	22	1.3142884808	72	2.4459202681
23	1.2571630183	73	2.0675703052	23	1.3307170868	73	2.4764942715
24	1.2697346485	74	2.0882460083	24	1.3473510504	74	2.2074204499
25	1.5854319920	75	2.1001284684	25	1.3641929385	75	2.5387935805
26	1.2952563150	76	2.1302197530	26	1.3812453503	76	2.220,322003
27	1.3082088781		2.1212219206	27	1.308510912	77	2.6026601065
28	1.3212909669	77 78		28		78	2.6351933578
			2.1730371701		1.4159923036		
29 30	1·3345038766 1·3478489153	79 80	2·1947675418 2·2167152172	29 30	1·4336922074 1·4516133600	79 80	2.6681332748 2.7014849408
31	1.3613274045	81	2.2388823694	31	1.4697585270	81	2.7352535025
32	1.3749406785	82	2.5015211031	32	1.4881305086	82	2.7694441713
33	1,3886900813	83	2.5838839020	33	1.5067321400	83	2.8040622234
34	1.4025769862	84	2.3067227440	34	1.255662917	84	2.8391130012
35	1.4166027560		2.3297899712	35	1.2446358703	85	2.8746019137
36	1.4307687836	86	2.3530878713	36	1.2639438187	86	2.9105344377
			2.3766187499	,, -		87	
37 38	1.4450764714	88		37	1.5834931165	88	2.9469161181
	1.4595272361		2.4003849374	38	1.6032867804		2.9837525696
39	1.4741225085		2.4243887868	39	1.6233278652	89	3.0210494767
40	1.4888637336	90	2.4486326746	20	1.6436194635	90	3.0588125952
41	1.203223200		2.4731190014	41	1.6641647068	91	3.0970477526
42	1.2182898946		2.4978501914	42	1.6849667656	92	3.1357608495
43	1.5339777936		2.228286933	43	1.7060288502	93	3.1749578603
44	1.2493122212		2.5480569803	44	1.7273542108	94	3.2146448334
45	1.5648107472		2.5735375501	45	1.7489461384	95	3.2548278938
46	1.5804588547	96	2.5992729256	46	1.7708079652	96	3.2955132425
47	1.5962634432		2.6252656548	47	1.7929430647	97	3.3367071580
48	1.6122260777	98	2.6515183114	48	1.8153548531	98	3.3784159975
49	1.6283483385		2.6780334945	49	1.8380467887	99	3.4206461975
50	1.6446318218			50	1.8610223736	100	

TABLE I.

Amount of £1 in n years at the following rates per cent.

Years	1½ per cent.	Years	1½ per cent.	Years	1f per cent.	Years	12 per cent.
1	1.012	51	2.1368210569	1	10175	51	2.4224527382
2	1030225	52	2.1688733728	2	1.03530625	52	2.4648456611
3	1.045678375	53	2.2014064734	3	1.0534241094	53	2.5079804602
4	1.0613635506	54	2.2344275705	4	1.0718590313	54.	2.5518701182
	1 0772840039	55	2.2679439840		1 0906165643	55	2.5965278453
5	1 0934432639	56	2.3019631438	5	1.1097023242	56	2.6419670826
7	1.1008449129	57	2.3364925909	7	1.1291221454	57	2.6882015065
8	1.1264925866	58	2.3715399798	8	1'1488817830	58	2.7352450329
9	1.1433899754	59	2.4071130795	9	1.1689872142	59	2.7831118210
1ó	1.1605408250	60	2.4432197757	1Ó	1.1894444904	60	2.8318162778
11	1.1779489374	61	2.4798680723	11	1.2102597690	61	2.8813730627
12	1.1956181715	62	2.2170660934	12	1.2314393149	62	2.9317970913
13	1.2135524440	63	2.5548220848	13	1.2529895030	63	2.9831035404
14	1.5317557307	64	2.5931444161	14	1.2749168193	64	3.0353078523
15	1.2502320667	65	2.6320415823	15	1.2972278636	65	3.0884257398
· 16	1.2689855477	66	2.6715222061	16	1.3199293512	66	3.1424731903
17	1.2880203309	67	2.7115950391	17	1.3430281149	67	3.1974664710
18	1.3073406358	68	2.7522689647	18	1.3662311069	68	3.2534221343
19	1.3269507454	69	2.7935529992	19	1.3904454012	69	3.3103570216
20	1.3468550065	70	2.8354562942	20	1.4147781958	70	3.3682882695
21	1.3670578316	71	2.8779881386	21	1.4395368142	71	3.4272333142
22	1.3822636991	72	2 9211579607	22	1.4647287084	72	3.4872098972
23	1.4083771546	73	2.9649753301	23	1.4903614608	73	3.5482360704
24	1.4295028119	74	3.0094499600	24	1.2164427864	74	3 [.] 610330201 7
25	1.4509453541	75	3.0545917094	25	1.2429802322	75	3.6735109803
26	1.4727095344	76	3.1004105851	26	1.5699826945	76	3.73779742 23
27	1.4948001774	77	3.1469167439	27	1.2924223912	77	3.8032088772
28	1.2172221801	78	3.1941204920	28	1.6254128960	78	3.8697650326
29 30	1.5399805128	79 80	3.2420323025	29 30	1.6538576217 1.6828001301	79 80	3·9374859206 4·0063919243
< 31	1.5865264238	18	3.3400227288	31	1.7122491324	18	4 076 50 378 29
32	1.6103243202	82	3.3901230697	32	1.7422134922	82	4.1428425991
33	1.6344791850	83	3.4409749158	33	1.7727022283	83	4.5204298446
34	1.6589963727	84	3.4925895395	34	1.8037245173	84	4.2942873369
35	1.6838813183	85	3.5449783826	35	1.8352896963	85	4.3694373958
36	1.2001302381	86	3.5981530583	36	1.8674072660	86	4.4459025503
37	1.7347766312	87	3.6521253542	37	1.9000868932	87	4.5237058449
38	1.7607982806	88	3.7069072345	38	1.9333384138	88	4.6028706972
39 40	1·7872102548 1·8140184087	89	3·7625108430 3·8189485057	39 40	1·9671718361 2·0015973432	89 90	4·6834209344 4·7653808007
41	1.8412286848	91	3.8762327333	41	2.0366252967	91	4.8487749647
42	1.8688471151	92	3.9343762243	42	2.0722662394	92	4.9336285266
43	1.8968798218	93	3.9933918676	43	2.1085308986	93	5.0199670228
44	1.9253330191	94	4.0532927457	44	2.1454301893	94	5.1078164488
45	1.9542130144	95	4.1140921368	45	2.1829752176	95	5.1972032366
46	1.9835262096	96	4.1758035189	46	2.2211772839	96	5.5881242933
47	2.0132791028	97	4.2384405717	47	2.2600478864	97	5°3806969934
48	2.0434782893	98	4.3020171803	48	2.2995987244	98	5.4748591908
49	2.0741304637	_99	4.3665474380	49	2.3398417021	99	5.5706692266
50	2.1052424206	100	4.4320456495	50	2.3807889319	100	5.6681559381
							D

THE ENGINEER'S VALUING ASSISTANT.

Years	2 per cent,	Years	2 per cent.	Years	21 per cent.	Years	21 per cent.
I	1.02	51	2.7454197897	I	1.0225	51	3.1104924437
2	1.0404	52	2.8003281855	2	1.04550625	52	3.1804785237
3	1.061508	53	2.8563347492	3	1.0690301406	53	3.52520392904
	1.08243216	54	2.0134614441		1.0030833188	1 1	
4	1.1040808032			4		54	3.3252101745
5		55	2.9717306730	5 6	1.1176776935	25.	3.4000274034
	1.1261624193	56	3.0311652865	13 1	1.1428254416	56	3.4765280200
7 8	1.1486856676	57	3.0912882923	7	1.1682390140	57	3.5547499004
	1.1216293810	58	3.1236243641	8	1.1948311418	58	3.6347317732
9	1.1920922686	59	3.5166968213	9	1.2217148425	59	3.7165132381
10	1.5189944500	60	3.2810307884	10	1.2492034265	60	3.8001347859
11	1.2433743084	61	3.3466514041	11	1.2773105036	61	3.8856378186
12	1.2682417946	62	3.4135844322	12	1.3060499899	62	3.9730646695
13	1.2936066305	63.	3.4818561209	13	1.3354361147	63	4.0624586246
14	1.3194787631	64	3.5514932433	14	1.3654834272	64	4.1538639437
15	1.3458683383	65	3.6225231081	15	1.3962068044	65	4.2473258824
ıál	1.3727857051	66	3.6949735703	ıá	1.4276214575	66	4.3428907148
17	1'4002414192	67	3.7688730417	17	1.4597429402	67	4.4406057558
18	1.4282462476	68	3.8442505025	18	1.4925871564	68	4.2402193823
19	1.4568111725	69	3.9211355126	19	1.261703674	69	4.6426810715
20		70	3.9995582229	20		70	
_	1.4859473960	,,,	3 9995502229	20	1.2602092007	10	47471413956
21	1.2126663439	71	4 0 7 9 5 4 9 3 8 7 3	21	1.5956206577	71	4.8539520770
22	1.2429796208	72	4.1611403221	22	16315221225	72	4 9631659988
23	1.5768992642	73	4.2443631826	23	1.6682313703	73	50748372337
24	1.6084372495	74	4.3292504462	24	1.7057665761	74	5.1890210212
25	1.6406059945	75	4.4158354551	25	1.7441463240	75	5:3057740456
26	1.6734181144	76	4.2041221642	. 26	1.7833896163	76	5.4251539616
27	1.7068864766	77	4.5942352075	27	1.8235158827	77	5.5472199258
28	1.7410242062	78	4.6861199117	28	1 8645449901	78	5 6720323741
29	1.7758446903	79	4.7798423099	29	1.9064972523	79	5.7996531025
3ó	1.8113615841	8ó	4.8754391561	3ó	1 9493934405	8ó	5.9301452973
31	1.8475888158	81	4.9729479392	31	1 9932547929	81	60635735665
32	1.8845405921	82	5.0724068980	32	20381030258	82	6.2000039717
33	1.9222314039	83	5.1738550360	33	2.0839603439	83	6.3395040611
34	1.9606760320	84	5.2773321367	34	2.1308404516	84	6.4821429025
35	1.9998895527	85	5.3828787794	35	2.1787935642	85	6-6279911178
36	2.0398873437	86	5.4905363550	36	2.2278164194	86	67771209179
		87				87	
37 38	2.0806850906	88	5.6003470821	37 38	2.2779422889	88	6.9296061386
	2.1222987924	1	57123540237		2.3291959904	1 - 1	7 0855222767
39	2.1647447683	89	5.8266011042	39	2.3816029002	89	7.2449465279
40	2.2080396636	90	5.9431331263	20	2.4351889654	90	7.4079578248
41	2.2522004569	91	6.0619957888	41	2.4899807171	91	7.5746368759
42	2.2972444660	92	6.1832357046	42	2.5460052833	92	7.7450662056
43	2.3431893253	93	6.3069004187	43	2.6032904022	93	7.9193301952
44	2.3900531425	94	6.4330384271	44	2 66 1 8644 362	94	8 0975151246
45	2.4378542053	95	6.2616991926	45	2.7217563860	95	8.2797092149
46	2.4866112894	96	6.6929331795	46	2.7829959047	96	8.4660026722
47	2.5363435152	97	6.8267918431	47	2.8456133126	97	8.6564877324
48	2.2870703855	98	6.9633276800	48	2.9096396121	98	8.8512587063
49	2.6388117932	99	7.1025942336	49	2,9751065934	99	9.0504120272
50		100	7.2446461183	50		100	
J U	4 0913000291	-	/ 2440401103	1 20	3.0420463997	#40	9.2540462979

TABLE I.

Amount of £1 in n years at the following rates per cent.

Years	2½ per cent.	Years	21 per cent,	Years	2‡ per cent.	Years	2; per cent.
` I	1.022	51	3.5230364377	1	1°0275	51	3 9 8 9 0 8 5 6 2 0 3
2	1.050625	52	36111123486	2	1 05575625	52	4.0987854749
3	1.076890625	53	3.7013901574	3	1.0847895469	53	4.5112050204
4	1.1038128906	54	3.7939249113	4	1.1146212594	54	4.3273183825
7	1.1314082129	55	3.8887730341		1.1422733440		4.4463196380
5	1.1206934182	56	3.9859923599	5	1.1432/33440	55 56	4.2682934281
7	1.1886857537		40856421689	7			4.6942297474
7 8	1.5184058975	57		8	1.5001504000	57 58	
		58	4.1877832231		1.2423805519		4.8233210654
9	1.2488629699	59	4.2924778037	9	1.2765460171	59	4.9559623947
10	1.2800845442	60	4.3997897488	10	1.3116510326	60	5.0922513606
11	1.3120866578	61	4.5097844925	11	1.3477214360	61	5.2322882730
12	1.3448888242	62	46225291048	12	1.3847837755	62	5.3761762005
13	1.3782110449	63	4.7380923325	13	1.4228653293	63	5.5240210460
14	1.4129738210	64	4.8565446408	14	1.4619941259	64	5.6759316248
15	1.4482981665	65	4.9779582568	15	1.2021989643	65	5.8320197444
16	1.4845056207	66	5.1024072132	16	1.5435094358	66	5.9924002874
17	1.216182612	67	5.2299673936	17	1.5859559453	67	6.1571912953
18	1.5596587177	68	5.3607165784	18	1.6295697338	68	6.3265140559
19	1.5986501856	69	5.4947344929	19	1.6743829015	69	6.2004931925
20	1.6386164403	70	5.6321028552	20	1.7204284313	7Ó	6.6792567553
21	1.6795818513	71	5.7729054266	21	1.7677402131	71	6.8629363160
22	1.7215713976	72	5.9172280622	22	1.8163530690	72	7.0516670647
23	1.7646106825	73	6 0651587638	23	1.8663027784	73	7.2455879090
24	1.8087259496	74	6.2167877329	24	1.9176261048	74	7.4448415765
25	1.8539440983	75	6.3722074262	25	1.9703608227	75	7.6495747199
26	1.9002927008	76	6.2312126118	26	2.0245457453	76	7.8599380247
27	1.9478000183	77	6.6948004271	27	2.0802207533		8.0760863203
28	1.9964950188	78	6.8621704378	28	2.1374268240	77	8.2981786942
29	2.0464073942	79	7.0332246988	29	2.13/4200240		8.5263786082
30	2.0975675791	80	7.2095678162	30	2.2566017284	79 80	8.7608540200
2.	avr 100067686	81	7:2808070116		212186582750	81	
31	2.1500067686	82	7.3898070116	31	2.3186582759		9.0017775055
32	2.2037569378	1 -	7 5745521869	32	2.3824213785	82	9.2493263869
33	2.2588508612	83	77639159916	33	2.4479379664	83	9.5036828626
34	2.3153221327	84	7.9580138914	34	2.5152562605	84	9.7650341413
35	2.3732051861	85	8-1569642387	35	2.5844258077	85	10.0335725802
36	2.4325353157	86	8.3608883446	36	2.6554975174	86	10.3094958261
37	2.4933486986	87	8.5699105533	37	2.7285236991	87	10.2930069613
38	2.2556824161	88	8.7841583171	38	2.8035581008	88	10.8843146528
39	2.6195744765	89	9.0037622750	39	2.8806559486	89	11.1836333057
40	2.6850638384	90	9.2288563319	40	2.9598739872	90	11.4911832216
41	2.7521904343	91	9.4595777402	41	3.0412705218	91	11.8071907602
42	2.8209951952	92	9.6960671837	42	3.1249024612	92	12.1318882061
43	2.8915200751	93	9.9384688633	43	3.2108403614	93	12.4655154401
44	2.9638080770	94	10.1869302849	44	3.2991384713	94	12.8083171147
45	3.0379032789	95	10.4416038495	45	3.3898647793	95	13.1605458353
46	3 1138508609	96	10.7026439457	46	3.4830860607	96	13.5224608458
47	3.1916971324	97	10.9702100444	47	3.5788709274	97	13.8943285190
48	3.27 1489 5607	98	11.2444652955	48	3.6772898779	98	142764225533
49	3.3532767997	99	11.5255769279	49	3.7784153495	99	14.6690241735
50	3.4371087197	100	111.8137163511	50	3.8823217716	100	15.0724223383
- •	¥ '9' ' {'	, ,	Ţ. T		5 f f		P 3

THE ENGINEER'S VALUING ASSISTANT.

Years	3 per cent.	Years	3 per cent.	Years	3½ per cent.	Years	3} per cent.
1	1.03	51	4.2124231993	1	1035	51	57803992956
2	1.0609	52	4.6508858952	2	1.071225	52	5.9827132709
3	1.092727	53	4.7904124721	3	1.108712822	53	6.1921082324
4	1.12520881	54	4.9341248463	4	1.1475230006	54	6.4088320237
	1.1592740743	55	50821485917	5	1.1876863056	55	6-6331411445
5	1.1940522965	56	5.2346130494	5 6	1.5563	56	6.8653010846
	1.2298738654	57	5.3916514409	7	1.2722792628	57	7.1055866225
7 8	1.2667700814	58	5.5534009841	8	1.3168090369	58	7.3542821543
9	1.3047731838	59	5.4200030136	9	1.3628973533	59	7.6116820297
10	1.3439163793	60	5.8916031040	10	1.4105987606	60	7.8780909008
,,	1.3842338707	61	6.0683511972	11	1.4599697172	61	8.1538240823
12	1.4257608868	62	6.2504017331	12	1.5110686573	62	8.4392079252
13	1'4685337135	63	6.4379137851	13	1.5639560604	63	8.7345802026
14	1.5125897249	64	6.6310511986	14	1.6186945225	64	9.0402902020
15	1.5579674166	65	6.8299827346	15	1.6753488308	65	9.3567006775
16	1.6047064391	66	7.0348822166	16	1.7339860398	66	9.6841852012
						- 1	
17	1.6528476323	67	7.2459286831	17	1.7946755512	67	10.0231316832
18	1.7024330612		7.4633065436		1.8574891955	68	10.3739412921
19	1.7535060531	69	7.6872057399	19	1.9225013174	69	10.7370292374
20	1.8061112347	70	7.9178219121	20	1.9897888635	70	11.1128252607
21	1.8602945717	71	8-1553565695	21	2.0594314737	71	11.2017741448
22	1.9161034089	72	8.4000172666	22	2.1312112723	72	11.9043362399
23	1.9232862111	73	8.6520177846	23	2.5001144804	73	12.3209880083
24	2.0327941065	74	8.9115783181	24	2.2833284872	74	12.7522225886
25	2.0937779297	75	9.1789256676	25	2.3632449843	75	13.1982203792
26	2.1262912672	76	9.4542934377	26	2.4459585587	76	13.6604996424
27	2.2212890056	77	9.7379222408	27	2.5315671083	77	14.1386171299
28	2·2879276757	78	10.0300599080	28	2.6201719571	78	14.6334687295
29	2.3565655060	79	10.3309617023	29	2.7118779756	79	15.1456401320
30	2.4272624712	80	10.6408905564	30	2.8067937047	80	15.6757375397
31	2.5000803453	81	10'9601172731	31	2'9050314844	81	16-2243883536
32	2.5750827557	82	11.2889207913	32	3.0067075863	82	16.7922419460
33	2.6523352384	.83	11.6275884151	33	3.1119423518	83	17:3799704141
34	2.7319052955	84	11.9764160675	34	3.2208603342	84	17.9882693786
35	2.8138624544	85	12.3357085495	35	3.3335904459	85	18.6178588068
36	2.8982783280	86	12.7057798060	36	3.4502661115	86	19.2694838651
37	2.9852266778	87	13.0869532002	37	3.5710254254	87	19 94 39 1 5 800 4
38	3.0747834782	88	13.4795617962	38	3.6960113152	88	20.6419528534
39	3.1670269825	89	13.8839486501	39	3.8253717113	89	21.3644212032
40	3.2620377920	90	14.3004671096	40	3.9592597212	90	22.1121759453
41	3.3598989258	91	14.7294811229	41	4.0978338114	91	22.8861021034
42	3.4606958935	92	15.1713655566	42	4.2412579948	92	23.6871156771
43	3.5645167703	93	15.6265065233	43	4.3897020246	93	24.5161647258
44	3.6714522734	94	16.0953017190	44	4.2433412922	94	25.3742304912
45	3.7815958417	95	16.5781607705	45	4.7023585513	95	26.2623285583
46	3.8950437169	96	17.0755055936	46	4.8669411006	96	27.1815100570
- 1	4.0118920284	97	17.5877707615	47	5.0372840392	97	28.1328629099
47 48	4.1322518793	98	18.1124038843	48	5.5132889802	98	29.1175131118
•	4.2562194356	99	18.6588660008	49	5.3960645949	99	30.1366260202
49 50	4.3839060187	100				100	
90	1 4 202700010/	1000	1 19 4100319009	11 20	7 704740033/	100	31.1914029831

Amount of $\pounds 1$ in n years at the following rates per cent.

Years	4 per cent.	Years	4 per cent.	Years	4½ per cent.	Years	4} per cent.
I	1.04	51	7:3909506801	1	1.042	51	9.4391049048
2	1.0819	52	7.6865887073	2	1 092025	52	9.8638646255
3	1 · 1 2 4 8 6 4	53	7:9940522556	3	1.141166152	53	10.3077385337
4	1·16985856	54	8.3138143454	4	1.1925186006	54	10.7715867677
5	1.2166529024	55	8.6463669197		1.2461819377	55	11.2563081722
6	1.5623190182	56	8.9922215965	5	1.3022601248	56	11.7628420400
7	1.3159317792	57	9.3519104603	7 8	1.3608618305	57	12.2921699318
7 8	1.3685690504	58	9.7259868787	8	1.4221006128	58	12.8453175787
9	1.4233118124	59	10.1120263239	9	1.4860951404	59	13.4233568698
10	1.4802442849	60	10.2196274080	10	1.5529694217	60	14.0274079289
11	1.5394540563	61	10.9404125044	11	1.6228530457	61	14 6586412857
12	1.6010322186	62	11.3780290045	12	1.6958814328	62	15.3182801435
13	1.6650735073	63	11.8331501647	13	1.7721960972	63	16.0076027500
14	1.7316764476	64	12.3064761713	14	1.8519449216	64	16.7279448738
15	1.8009435055	65	12.7987352182	15	1 9352824431	65	17:4807023931
16	1.8729812457	66	13.3106846269	16	2.0223701530	66	18·2673340008
17	1.9479004956	67	13.8431120120	17	2.1133768099	67	19:0893640308
18	20258165154	68	14.3968364925	18	2.2084787664	68	19.9483854122
19	2.1068491760	69	14.9727099521	19	2.3028603108	69	20.8460627557
20	2.1911231430	70	15.5716183502	20	2.4117140248	70	21.7841355797
21	2.2787680688	71	16-1944830842	21	2.5202411560	71	22.7644216808
22	2.3699187912	72	16.8422624076	22	2.6336520080	72	23.7888206565
23	2.4647155432	73	17.5159529039	23	2 752 166 348 3	73	24.8593175860
24	2.5633041649	74	18.5162010501	24	2.8760138340	74	25.9779868774
25	2.6658363315	75	18.9452546609	25	3 0054344565	75	27·1469962869
26	2.7724697847	76	19.7030648473	26	3.1406790071	76	28.3686111198
27	2.8833685761	77	20.4911874412	27	3.2820095624	77	29.6451986202
28	2.9987033192	78	21.3108349389	28	3.4296999927	78	30.9792325581
29	3.1186514519	79	22.1632683364	29	3.5840364924	79	32.3732980232
30	3.2433975100	80	23.0497990699	30	3.7453181345	80	33.8300964342
31	3.3731334104	81	23 97 179 10327	31	3.9138574506	18	35.3524507738
32	3.5080587468	82	24.9306626740	32	4.0899810359	82	36.9433110586
33	3.6483810967	83	25.9278891809	33	4.2740301825	83	38.6057600562
34	3.7943163406	84	26.9650047482	34	4.4663615407	84	40:3430192587
35	3.9460889942	85	28 04 36 04 9 3 8 1	35	4.6673478100	85	42 1584551254
36	4.1039325540	86	29.1653491356	36	4.8773784615	86	44.0555856060
37	4.2680898561	87	30.3319631010	37	5.0968604922	87	46·03808 69583
38	4.4388134504	88	31.5452416251	38	5.3262192144	88	48.1098008714
39	46163659884	89	32.8070512901	39	5.2628990790	89	50.2747419106
40	4.8010206279	90	34.1193333417	40	5.8163645376	90	52.5371052966
41	4 99 306 145 31	91	35.4841066753	41	6.0781009418	91	54.9012750350
42	5.1927839113	92	36.9034709424	42	6.3216124842	92	57.3718324115
43	5.4004952676	93	38-3796097801	43	6.6374381810	93	59.9535648701
44	5 6 1 6 5 1 5 0 7 8 3	94	39.9147941713	44	6.9361228991	94	62 65 147 52892
45	5.8411756815	95	41.2113829381	45	7.2482484296	95	65.4707916772
46	6.0748227087	96	43.1718413756	46	7.5744196089	96	68.4169773027
47	6.3178156171	97	44.8987150307	47	7.9152684913	97	71.4957412813
48	6.5705282417	98	46.6946636319	48	8.2714555734	98	74.7130496390
49	6.8333493714	99	48.5624501772	49	8.6436710742	99	78.0751368727
50	7.1066833463	100	50.5049481842	50	9.0326362725	100	81.5885180320

Years	5 per cent.	Years	5 per cent.	Years	5½ per cent.	Years	5½ per cent.
1	1.02	51	12.0407697750	1	1.052	51	15.3417690708
2	1.1052	52	12.6428082638	2	1.113052	52	16.1855663697
3	1.127622	53	13.2749486769	3	1.174241372	53	170757725200
4	1.51220052	54	13.9386961108	4	1.2388246506	54	18.0149400086
5	1.2762815625	55	14.6356309164	5	1.3069600064	55	19:0057617091
	1:3400956406	56	15.3674124622	6	1.3788428068	56	20.0210286031
7 8	1'4071004227	57	16.1357830853	7 8	1.4546791611	57	21.1238879262
8	1.4774554438	58	16.9425722396	8	1.5346865150	58	22.3173517622
9	1.5513282160	59	17.7897008516	9	1.6190942733	59	23.2448061091
10	1.6288946268	60	18.6791858941	10	1.7081444584	60	24.8397704451
11	1.7103393581	61	19.6131451888	11	1.8020924036	61	26.2059578196
12	1.7958563260	62	20.5938024483	12	1.9012074858	62	27.6472854996
13	1.8856491423	63	21.6234925707	13	2.0057738975	63	29.1678862021
14	1.9799315994	64	22.7046671992	14	2.1160914618	64 .	30.7721199432
15	20789281794	65	23.8399005592	15	2.2324764922	65	32.4645865401
16	2.1828745884	66	25.0318955872	16	2.3552626993	66	34.2501387998
17	2.2920183178	67	26.2834903665	17	2.4848021478	67	36.1338964338
18	2.4066192337	68	27.5976648848	18	2.6214662659	68	38.1212607377
19	2.5269501954	69	28.9775481291	19	2.7656469105	69	40.2179300782
20	2.6532977051	70	30.4264255355	20	2.9177574906	70	42.4299162325
21	27859625904	71	31.9477468123	21	3.0782341526	71	44.7635616253
22	2.9252607199	72	33.2421341229	22	3.2475370310	72	47.2255575147
23	3.0715237559	73	35.2223908606	23	3.4261515677	73	49.8229631780
24	3 22 50 99 94 37	74	36.9835104036	24	3.6145899039	74	52.5632261528
25	3.3863549409	75	38.8326859238	25	3.8133923486		55.4542035912
26	3.5556726879	76	40.7743202199	26	4.0231289278	76	58.5041847888
27	3.7334563223	77	42.8130362310	27	4.2444010188	77 .	61.7219149521
28	3.9201291385	78	44.9536880425	28	4.4778430749		65.1166202745
29	4.1161325924	79	47.2013724446	29	4.7241244440		68.6980343896
30	4.3219423752	80	49.5614410669	30	4.9839512884	80	72.4764262810
.31	4.5380394939	81	52.0395131202	31	5.2580686093	81	76.4626297265
32	4.7649414686	82	54.6414887762	32	5.5472623828	82	80.6680743614
33	5.0031885420	83	57.3735632150	33	5.8523618138	83	85.1048184513
34	5.2533479691	84	60.2422413758	34	6.1742417136	84	89.7855834661
35	5.2160123626	85	63.2543534446	35	6.5138250078	85	94.7237905568
36	5.7918161360	86	66.4170711168	36	6.8720853833	86	99.9335990374
37	6.0814069428	87	69.7379246726	37	7.2500500793	87	105.4299469845
38	6.3854772899	88	73.2248209063	38	7.6488028337	88	111.5285940686
39 40	6°7047511544 7°0399887121	89 90	76.8860619516	39 40	8.0694869895 8.5133087740	89 90	117.3461667424
						1	
41	7:3919881477	91	84.7668833016	41	8.9815407565	91	130.6092172384
42	7.7615875551	92	89.0052274667	42	9.4755254982	92	137.7927241865
43	8.1496669329	93	93.4554888400	43	9.9966794005	93	145.3713240168
44	8.5571502795	94	98.1282632820	44	10.5464967676	94	153.3667469377
45	8.9850077935	95	103.0346764461	45	11.1265540898	95	161.8019179138
46	9.4342581832	96	108.1864102685	46	11.7385145647	96	170.7010233991
47	9.9059710923	97	113.5957307819	47	12.3841328658	97	180.0895796860
48	10.4012696469	98	119.2755173210	48	13.0662601734	98	189.9945065687
49	10.9213331293	99	125.2392931870	49	13.7838494830	99	200.4442044300
50	11.4073997858	100	131.5012578464	50	14.5419012045	100	211.4686356737

Amount of £1 in n years at the following rates per cent.

Years	6 per cent.	Years	6 per cent.	Years	7 per cent.	Year	7 per cent.
1	106	51	19.5253635315	1	1.07	51	31.5190168175
2	1.1236	52	20.6968853434	2	1.1449	52	337253479947
3	1.101016	53	21 9386984640	3	1.225043	53	360861223543
4	1.26247696	54	23.25502037.18	4	1.31079601	54	38-6121509191
Ė	1.3382255776	55	24.6503215941	1 7	1.4025517307	55	41.3150014834
5	1.4185191123	56	26.1293408898	5	1.2007303518	56	44.2070515873
7	1.203630230	57	27 6971013432		1.6057814765	, -	
7 8				7 8		57	47.3015451984
	1.5938480745	58	29.3589274238	41	17181861798	58	50.6126533623
9	1.6894789590	59	31.1204630692	9	1.8384592124	59	54.1555390976
10	1.7908476965	60	32.9876908533	10	1-9671513573	60	57~9464268345
11	1.8982985883	61	34.9669523045	11	2.1048519523	61	62 0026767129
12	2.0121964718	62	37.0649694428	12	2.2521915890	62	66.3428640828
13	2.1329282601	63	39.2888676094	13	2.4098450002	63	70°9868645686
14	2.2609039558	64	41 6461996659	14	2.2782341202	64	75.9559450884
15	2.3962281931	65	44.1449716459	15	2.7590315407	65	81.2728612446
16	2.5403516847	66	46.7936699447	16	2.9521637486	66	86.9619615317
17	2.6927727858	67	496012901413	17	3.1288122110	67	930492988389
18	2.8543391529	68	52.5773675498	18	3.3799322757	68	99.5627497577
19	3.0255995021	69	55.7320096028	19	36165275350	69	106.5321422407
20	3.5071354722	7Ó	590759301790	20	3.8696844625	7Ó	113.9893921975
21	3.3995636005	71	62-6204859897	21	4.1405623749	71	121.9686496514
22	3.6035374166	72	66.3777151491	22	4.4304017411	72	130.5064551270
23	3.8197496616	73	70.3603780580	23	4.7405298630	73	139-6419069858
24	4.0489346413	74	74.2820007412	24	5.0723669534	74	149.4168404749
25	4.5018707197	75	79.0569207860	25	5.4274326401	75	159.8760193081
26	4.5493829629	76	83.8003360332	26	5.8073539249	76	171 0673406597
27	4.8223459407		88.8283561952		6.5138676297	77	183 0420545058
28	5.1116866971	77 78	94.1280272669	27 28	6.6488383637	78	195:8549983212
29			99.8075410209	1 1			209.5648482037
30	5.4183878990 5.7434911729	79 80	105.7959934821	29 30	7·1142570492 7·6122550427	79 80	224-2343874780
	6.000.006.00	٥.			0	٠.	
31	6.0881006433		112.1437530911	31	8.1451128956		239 9307947085
32	6.4533866819	82	118.8723782765	32	8.7152707983		256.7259503380
33	6.8405898828		126.0047209731	33	9.3253397542		274.6967668617
34	7.2510252758	84	133.2620042312	34	9.9781135370		293.9255405420
35	7.6860867923		141.5789044854	35	10.6765814846		314.5003283799
36	8.1472519999		1500736387545	36	11.4239421885		336.2123213666
37	8.6360871198		1590780570798	37	12.2236181417		360 0714259622
38	9.1542523470	88	168.6227405046	38	130792714116		385:2764257796
39	9.7035074879	89	178-7401049348	39	13.9948204105	89	412.2457755842
40	10.2857179371	90	189.4645112309	40	14.9744578392	90	441.1029798750
41	10.9028610134	91	200.8323819048	41	16.0226698879	91	471.9801884663
42	11.5570326742		212.8823248191	42	17.1442567801		505 0188016589
43	12.2504546346		225.6552643082	43	18.3443547547	93	540.3701177751
44	12.9854819127		239 1945801667	44	19.6284595875		578.1960260193
45	13.7646108274	95	253.5462549767	45	21.0024517587		618-6697478407
46	14.2004874771		268.7590302753	46	22.4726233818		661 9766301895
47	15.4659167257	97	284.8845720918	47	24.0457070185		708.3149943028
48			301 9776464174	48	25.7289065098		757.8970439040
	16.3938717293				27.5299299655		810.9498369773
49	17:3775040330		320.0963052024	49	29.4570250630	77	867.71622EE6E7
50	10-4210542750	700	339:3020835145	50	29 45/0250030	-70	00//10343303/

ears	8 per cent.	Years	8 per cent.	Years	9 per cent.	Years	9 per cent.
. 1	1.08	51	50.6537415143	1	100	51	81 049696882
2	1.1664	52	54.7060408355	2	1.1881	52	88.344169602
	1.259712		590825241023	3	1.5020	53	96.295144866
3		53					104.961707904
4	1.36048896	54	63.8091260305	4	1.41158161	54	
5	1.4693280768	55	68.9138561129	5	1.5386239549	55	114.408261615
0	1.2868743229	56	74.4269646020		1.6771001108	56	124.705005161
7 8	1.7138242688	57	80·381121 7 701	7	1.8280391208	57	135.928455625
8	1.8509302103	58	86 8116115117	8	1 9925626417	58	148-162016631
9	1.9990046271	59	93.7565404327	9	2.1718932794	59	161.496598128
1ó	2.1589249973		101.2570636673	1ó	2.3673636746	60	176031291960
11	2.3316389971	61	109:3576287606	11	2.5804264053	61	191.874108236
12	2.5181701168	62	118.1062390615	12	2.8126647818	62	209.142777978
13	2.7196237262		127.5547381864	13	30658046121	63	227 96 562 7996
14	2.9371936243	1	137.7599172413	14	3.3417270272	64	248.482534515
•							270.845962622
15 16	3.1721691142		148.7798466206	15	3.6424824597	66	
	3.4259426433		160 6822343503	16	3.9703058811		295.222099258
17	3.7000180548		173.5368130983	17	4.3276334104	67	321.792088191
18	3.9960194992	68	187.4197581462	18	4.7171204173	68	350 753376128
19	43157010591	69	202.4133387979	19	5.1416612548	69	382:321179980
20	4.6609571439	70	218 6064059017	20	5-6044107678	70	416.730086178
2 I	50338337154	71	236.0949183738	21	6.1088077369	71	454.235793934
22	5.4365404126	72	254.9825118437	22	6.6586004332	72	495.117015388
23	5.8714636456	73	275.3811127912	23	7.2578744722	73	539 677546773
24	6.3411807372		297.41,16018145	24	7.9110831747	74	588.248525983
25	6.8484751962		321.2045299597	25	8.6230806604	75	641.190893321
2 6	712062522110	76		26		76	698.898073720
	7.3963532119	1 /0	346.9008923565	I I	9.3991579198		
27	7.9880614689	77	374.6529637450	27	10.5420851356	77	761.798900355
28	8.6271063864	78	404.6252008446	28	11.1617395246	78	830°360801387
29 30	9.3172748973 10 0 626568891	79	436.9952169122	29 30	12·1721820818 13·2676784691	79 80	905°093273512 986°551668128
		ł				1 .	
31	10.8676694402	18	509.7112210063	31	14.4617695314	81	1075.341318259
32	11.7370829954	82	550.4881186869	32	15.7633287892	82	1172.122036903
33	12 6760496351	83	594.5271681818	33	17.1820283802	83	1277613020224
34	13:6901336059	84	642.0893416363	34	18.7284109344	84	1 392 598 1 92044
35	14.7853442943	85	693.4564889673	35	20.4139679185	85	1517.932029328
36	15.9681718379	86	748.9330080846	36	22.2512250312	86	1654.545911968
37	17.2456255849	87	808.8476487314	37	24.2538352840	87	1803.45504404
38	18.6252756317	88	873.5554606299	38	26.4366804596	88	1965.76599800
3 9	20.11232,2031,	89	943.4398974803		28.8159817009	89	2142.684937830
10	21.7245214968	90	1018.9150892787	39 40	31.4094200540	90	2335.526582235
41	23·4624832166	91	1100.4282964210	41	34.2362678589	91	 2545 [.] 723974646
42	25.3394818739		1188.4625601347	42	37.3175319662	92	2774.839132353
43	27.3666404238	02		11 "		_	
			1283.5395649455	43	40.6761098431	93	3024.574654265
	29.5559716577	94	1386.2227301411	44	44.3369597290	94	3296.786373149
45	31.9204493903	95	1497.1205485524	45	48.3272861046	95	3593.49714673
46	34.4740853415		1616.8901924366	46	52.6767418540	96	3916-911889938
47	37-2320121689	97	1746.2414078316	47	57.4176486209	97	4269433960033
48	40.2105731424		1885 9407204581	48	62.5852369968	98	4653.683016436
49	43.4274189938		2036.8159780947	49	68.2179083265	99	5072.51448791
	1.5		2199.7612563423	ローマン	1 7 7 7	1 77	」」・・・ フェママ・/ ファ。

Amount of £1 in n years at the following rates per cent.

Years	10 per cent.	Years	10 per cent.	Years	11 per cent.	Years	11 per cent.
1	1.10	51	129.129938	I	1.11	51	204.866958
2	1.51	52	142.042932	2	1.5351	52	227:402323
3	1.331	53	156.247225	3	1.367361	53	252.416579
4	1.4641	54	171.871948	4	1.218070	54	280.182402
# 1	1.61051	55	189.059142	7	1.685058	55	311 002466
5			207.965057	5	1.870415	56	345.212738
	1.771561	56	228.761562		2076160	57	383.186139
7 8	1.948717	57		7 8	2.304538	58	425.336614
	2.143589	58	251.637719				472.123642
9	2.357948	59	276.801490	9	2.558037	59	
10	2.593742	60	304.481640	10	2.839421	60	524.057242
11	2.853117	61	334.929803	11	3.151757	61	581703539 645690928
12	3.138428	62	368-422784	12	3.498851	63	716.716930
13	3.452271	63	405.265062	13	3.883280		
14	3.797498	64	445791568	14	4.310441	64	795.555793
15	4.177248	65	490:370725	15	4784589	65	883.066930
16	4.594973	66	539.407798	16	5.310894	66	980-204292
17	5°054470	67	593.348578	17	5.892093	67	1088 026764
18	5.259917	68	652683435	18	6.543553	68	1207.709708
19	6.115909	69	717.951779	19	7.263344	69	1340.557776
20	6.727500	70	789:746957	20	8.062312	70	1488-019132
21	7.400250	71	868-721652	21	8-949166	71	1651.701236
22	8.140275	72	955.593818	22	9.933574	72	1833.388372
23	8.954302	73	1051.153200	23	11.026267	73	2035.061003
24	.9.849733	74	1156.568519	24	12.239157	74	2258.917813
25	10.834706	75	1271.895371	25	13.585464	75	2507·39877 3
26	11.918177	76	1399:084909	26	15.079865	76	2783.212638
27	13.109994	77	1538.993399	27	16.738650	77	3089:366028
28	14.420994	78	1692.892739	28	18.579901	78	3429.196291
29	15.863093	79	1862-182013	29	20.623691	79	3806.407883
30	17.449402	80	2048.400215	30	22.892297	80	4225.112750
31	19.194342	81	2253.240236	31	25.410449	8r	4689.875153
32	21.113777	82	2478.564260	32	28.205599	82	5205.761420
33	23.225154	83	2726.420686	33	31.308214	83	5778.395176
34	25.547670	84	2999:062754	34	34.752118	84	6414 018645
35	28.102437	85	3298.969030	35	38.574851	85	7119:560696
36	30.013681	86	3628.865933	36	42.818085	86	7902.712373
37	34.003949	87	3991.752526	37	47.528074	87	8772:010734
38	37.404343	88	4390.927778	38	52.756162	88	9736.931915
39	41.144778	89	4830.020556	39	58.559340	89	10807.994425
40	45.259256	90	5313.022612	40	65.000867	90	11996.873812
41	49.785181	91	5844.324873	41	72.150963	91	13316-529932
42	54.763699	92	6428.757360	42	80087569	92	14781.348224
43	60.240069	93	7071.633096	43	88.897201	93	16407.296529
44	66.264076	94	7778.796406	44	98.675893	94	18212.099147
45	72.890484	95	8556.676047	45	109.530242	95	20215.430053
46	80.179532	96	9412.343651	46	121.578568	96	22439.127359
47	88.197485	97	10353.578016	47	134.952211	97	24907.431368
48	97.017234	98	11388.935818	48	149.796954	98	27647.248819
49	106.718957	99	12527.829400	49	166.274619	99	30688.446189
50	117.390853	100		50	184.564827	100	
90	11/ 390033	1-00	.5/00 0.2540	1, 55	.04 304027	1200	74-04 1/25/0

Years	12 per cent.	Years	12 per cent.	Years	13 per cent.	Years	13 per cent.
1	1.13	51	323 682453	1	1.13	51	509:331595
2	1.2544	52	362.524347	2	1.2769	52	575.544703
3	1.404928	53	406-027269	3	1.442897	53	650.365514
4	1.243210	54	454.750541	4	1.630474	54	734.913031
71	1.762342	55	509:320606		1.842435	55	830.451725
5	1 97 3823	36	570.439078	5	2.081952	56	938.410449
				~			1060.403808
7 8	2.510681	57	638.891768	7 8	2.352605	57	
	2.475963	58	715.558780		2.658444	58	1198.256303
- 9	2.773079	59	801.425833	9	3.004042	59	1354 029622
10	3·f05848	60	897.596933	10	3.394567	60	1530053473
11	3.478550	61	1005:308566	11	3.835861	61	1728-960425
12	3.895976	62	1125.945593	12	4 .33452 3	62	1953.725280
13	4:363493	63	1261.059065	13	4.898011	63	2207:709566
14	4.887112	64	1412:386152	14	5 °534753	64	2494.711810
15	5.473566	65	1581 872491	15	6.254270	65	2819 024345
16	6.130394	66	1771 697 189	16	7 067 326	66	3185.497510
17	6.866041	67	1984.300852	17	7:986078	67	3599 612186
18	7 •68996 6	68	2222.416954	18	9024268	68	4067.561770
19	8612762	69	2489 106989	19	10.197423	69	4 596·3448 00
20	9.646293	70	2787.799828	20	11.523088	70	5193.869624
21	10.803848	71	3122:335807	21	13.021089	71	5869072675
22	12.100310	72	3497:016104	22	14.713831	72	6632.052123
23	13.552347	73	3916.658036	23	16.626629	73	7494.218899
24	15.178629	74	4386.657001	24	18 788091	74	8468.467356
25	17.000064	75	4913 055841	25	21.230542	75	9569:368112
26	19.040072	76 1	5502.622542	26	23.990513	76	10813.385967
27	21.324881	77	6162.937247	27	27.109279	77	12219.126143
28	23.883866	78	6902.489716	28	30 63 3486	78	13807.612541
29	26.749930	79	7730 788482	29	34.615839	79	15602602172
30	29.959922	8ó	8658.483100	3ó	39.115898	80	17630 940454
31	33.555113	81	9697.501072	31	44*200965	81	19922 962713
32	37.581726	82	10861.301301	32	49 947090	82	22512.947866
33	42.091533	83	12164.545345	33	56.440212	83	25439 631089
34	47.142517	84	13624.290786	34	63.777439	84	28746.783130
35	52.799620	85	15259.205681	35	72.068506	85	32483.864937
36	59.135574	86	17090:310362	36	81.437412	86	36706.767379
37	66.231843	87	19141.147606	37	92 024276	87	41478.647138
38	74.179664	88	21438.085318	38	103'987432	88	46870.871266
39	83.081224	89	24010655557	39	117.505798	89	52964 084530
40	93.050970	90	26891 934223	40	132.781552	90	59849:415520
41	104.217087	91	30118-966330	41	150043153	91	67629.839537
42	116.723137	92	33733.242290	42	169.548763	92	76421.718677
43	130.729914	93	37781.231365	43	191.290103	93	86356.542105
44	146.417503	94	42314.979128	44	216.496816	94	97582.892578
	163.987604	95	47392.776624	45	244.641402	95	110268.668614
45 46	183.666116	96	53079 909819	46	276.444784	96	
. ,		1 - 1	59449.498997	47	312-382606	97	124603.595533
47	205.706050	97		48			140802062953
48	230.390776	98	66583.438876		352.992345	98	159106.331137
49	258.037669	99	74573.451542	49	398.881350	99	179790154184
50	289 [,] 002190	100	83522.265727	50	450.735925	1400	203162.874228

Amount of £1 in n years at the following rates per cent.

Years	14 per cent.	Years	14 per cent.	Years	15 per cent.	Years	15 per cent.
1	1.14	51	798.265607	1	1.12	51	1246.306028
2	1.2996	52	910022792	2	1.3225	52	14331136966
3	1.481544	53	1037.425983	3	1.520875	53	1648-107511
4	1.688960	54	1182.665620	4	1749006	54	1895.323638
	1.925415		1348.238807		2011357	55	2179.622184
5		55 56		5			2506.262210
	2.194973	1 50	1536.992240		2.313061	56	
7 8	2.502269	57	1752-171154	7 8	2.660020	57	2882.550338
	2.852586	58	1997.475115	11 - 1	3.059023	58	3314.932889
9	3.251949	59	2277.121631	9	3.517876	59	3812.172822
20	3.707221	60	2595.918660	10	4.045558	60	4383.998746
11	4.226232	61	2959:347272	1.1	4.652391	61	5041.598558
12	4.817905	62	3373.655890	12	5.350250	62	5797:838341
13	5.492411	63	3845 967715	13	6.152788	63	6667.514092
14	6.261349	64	4384.403195	14	7.075706	64	7667.641206
15	7.137938	65	4998.219642	15	8.137062	65	8817.787387
16	8.137249	66	5697.970392	16	9.357621	66	10140.45549
17		67	6495.686247	17		67	11661.2381
18	9.276464	68			10.761264	68	
	10.575169		7405.082321	18	12.375454		13410.752392
19	12055693	69	8441.793846	19	14.231772	69	15422.365251
20	13.743490	70	9623.644985	20	16.366537	70	17735.720039
21	15.667578	71	10970 955283	21	18:821518	71	20396 07804
22	··· 17·861039	72	12506.889022	22	21.644746	72	23455.48975
23	20:361585	73	14257 853485	23	24.891458	73	26973.813214
24	23.212207	74	16253 952973	24	28.625176	74	31019.885196
25	26.461916	75	18529.506390	25	32.918953	75	35672.867976
26	30.166584	76	21123 637284	26	37.856796	76	41023.798172
27	34.389906		24080 946504	27		77	47177:367898
28		77		28	43.535315	78	54253.973082
	39.204493		27452.279015	13	50.065612		
29	44.693122	79	31295.598077	29	57.575454	79	62392.06904
30	50.950159	80	35676.981807	30	66.211772	80	71750.879401
31	58083181	81	40671.759260	31	76.143538	81	82513.51131
32	66.214826	82	46365.805557	32	87.565068	82	94890.538008
33	75.484902	83	52857:018335	33	100.699829	83	109124118710
34	86.052788	84	60257:000902	34	115.804803	84	125492•736516
35	98·100178	85	68692.981028	35	133.175523	85	144316:646994
36	111.834203	86	78309 998372	36	153.151852	86	165964-14404
37	127.490992	87	89273.398144	37	176.124630	87	190858-765646
38	145.339731	88	101771.673884	38	202.543324	88	219487.580496
39	165.687293	89	116019 708227	39	232.924823	89	252410.71757
10	188.883514	90	132262.467379	10	267.863546	90	290272:32520
	0.1.51.0.7.0.0h		150779:212812		308*043078		222812117208
41	215.327206	91		41		91	333813.17398
42	245.473015	92	171888.302606	42	354.249540	92	383885.120081
43	279.839237	93	195952.664971	43	407.386971	93	441467.92259
44	319 016730	94	223386038067	44	468.495017	94	507688-110988
45	363.679072	95	254660083396	45	538.769269	95	583841.327636
46	414.594142	96	290312.495072	46	619.584659	96	671417.52678
47	472.637322	97	330956.244382	47	712.522358	97	772130155790
48	538.806547	98	377290118595	48	819 400 712	98	887949 679168
				11 '			
49	614.239464	99	430110.735199	49	942:310819	99	1021142131044

THE ENGINEER'S VALUING ASSISTANT.

Years	16 per cent.	Years	16 per cent.	Years	17 per cent.	Years	17 per cent.
I	1.16	51	1938-01641	1	1.12	51	3002.47188
2	1.3456	52	2248.09904	2	1.3689	52	3512.89210
3	1.26000	53	2607.79488	3	1.60161	53	411008376
3	1.81064				1.87388		4808.79800
4		54	3025 04207	4		54	
5	2.10034	55	3509.04880	5 6	2.19244	55 56	5 626.3 9 366
6	2.43640	56	4070.49660	6	2.26216		6582.76358
7 8	2.82621	57	4721.77606	7 8	3.00124	57	7701:83339
8	3.27841	58	5477.26023	8	3.21142	58	901114507
9	3.80296	59	6353.62187	9	4.10840	59	10543 03973
10	4.41144	60	7370.50137	16	4.80682	6ó	12335.35648
11	5.11726	61	8549.43358	11	5.62399	61	14432:36708
12	5.93603	62	9917:34296	12	6.28002	62	16885-86949
13	6.88579	63	11504.11783	13	7.69868	63	19756.46730
14	7.98752	64	13344.77668	14	9.00745	64	23115 06674
		65		15	10.23872	65	27044.62809
15	9.26552	66	15479.94095	16		66	
16	10.74800		17956.73150		12.33030		31642.21486
17	12.46768	67	20829.80855	17	14.42646	67	37021:39139
18	14.46251	68	24162.57791	18	16.87895	68	4331502793
19	16.77652	69	28028.59038	19	19:74838	69	50678·5826 7
20	19.46076	70	32513.16484	20	23.10560	90	59293.94173
21	22.57448	71	37715.27121	21	27:03355	71	69373 91 182
22	26.18640	72	43749:71461	22	31 62925	72	81167:47683
23	30:37622	73	50749.66895	23	37:00623	73	94965:94789
24	35.23642	74	58869.61598	24	43.29729	74	111110115904
25	40.87424	75	68288.75453	25	50.65783	75	129998.88607
26	47.41412	76	79214.95526	26	59.26966	76	152098-69670
27	55.00038	77	91889.34810	27	69:34550	77	177955.47514
28		78	106591.64379	28	81.13453	78	208207:90592
	63.80044						
29 30	74:00851 85:84988	79 80	123646.30680	29 30	94 [.] 92705 111 [.] 0646 5	79 80	243603·24992 285015·80241
31	99.58586	81	166378-47043	31	129 94564	81	333468:48882
32	112.21020	82	192999:02570	32	152.03640	82	390158.13192
- 1		83	223878.86981	33	177.88259	83	45648501435
33	134.00273			,,		84	
34	155.44317	84	259699:48898	34	208.12263		534087'46679
35	180.31407	85	301251.40722	.35	243.20347	85	624882.33614
36	209.16432	86	349451.63238	36	284 89906	86	731112.33329
37	242.63062	87	405363:89356	37	333.33191	87	855401:42994
38	281.4515 1	88	47022211653	38	3 89 ·99 833	88	1000819.67303
39	326.48376	89	545457.65517	39	456.50802	89	117095901745
40	378.72116	9ó	632730.88000	40	533.86871	90	1370022.05042
41	439.31654	91	733967-82080	41	624 62639	91	1602925.79899
42	509.60719	92	851402.67213	42	730.81288	92	1875423'18482
43	591.14434	93	987627.09967	43	855.05107	93	2194245-12623
44	685.72744	94	1145647.43561	44	1000.40975	94	2567266.79769
45	795.44383	95	1328951.02531	45	1170.47941	95	3003702.15330
		96	1541583.18936	46	1369.46091	96	3514331.21936
46	922.71484				1602.26927		4111767.87766
47	1070.34921	97	1788236.49966	47		97	
48	1241.60509	98	2074354.33961	48	1874.65504	98	4810768-41686
49	1440.36190	99	2406251 03394	49	2193'34640	99	5628599.04772
50	1670'70380	100	2791251:19938	50	2566.21528	1300	6585460·88584

TABLE I.

Amount of £1 in n years at the following rates per cent.

Years	18 per cent.	Yеал	18 per ceat.	Years	19 per cent.	Year	19 per cent.
1	1.18	51	4634.28109		1,10	51	7126.80754
2	1.3924	52	5468:45169		1.4161	52	8480190098
3	1·6430 3	53	6452.77300		1 68516	53	10092.27216
	1·9387 8	54	7614.27214	4	200534	54	12009.80387
5 6	2.28776	55	8984-84112	5	2.38635	55	14291 66661
6	2 69955	56	10602.11252	6	2.83976	56	17007'08327
7 8	3'18547	57	12510.49278	7 8	3.37932	57	20238 42909
8	3.75886	58	14762:38148	8	402139	58	24083.73061
9	4.43545	59	1741961014	9	4.78545	59	28659 63943
10	5.23384	60	2055513997	10	5.69468	60	34104.97092
11	6-17593	61	24255 06516	ĹI	6.77667	61	40584.91539
12	7:28759	62	28620.97689	12	806424	62	48296:04932
13	8.59936	63	33772.75273	13	9:59645	63	57472.29869
14	10.14724	64	39851.84822	14	11.41977	64	68392.03544
15	11.97375	65	47025.18090	15	13.28953	65	81386.52217
16	14.12902	66	55489.71346	16	16.17154	66	96849 961 39
17	16.67225	67	65477.86188	17	19.24413	67	115251.45405
18	19.67325	68	77263.87702	18	22.90022	68	137149.23032
19	23.21444	69	91171.37489	19	27.25162	69	163207.58408
20	27'39303	70	107582-22237	20	32.42942	70	194217 02506
21	32:32378	71	126947 02239	21	38.29101	71	231118-25982
22	38.14206	72	149797.48643	22	45.92331	72	275030:72918
23	45.00763	73	176761 03398	23	54.64873	73	327286.56773
24	53.10001	74	208578.02010	24	65.03199	74	389471.01560
25	62.66863	75	246122.06372	25	77:38807	75	463470.50856
26	73 ·94898	76	290424.03518	26	92.09181	76	551529'90518
27	87.25980	77	342700:36152	27	109.58925	77	656320.58717
28	102.96656	78	404386-42659	28	130.41121	78	781021:49873
29	121.50054	79	477175.98338	29	155.18934	79	929415.58349
30	143.37064	80	563067.66039	30	184.67531	80	1106004.54435
31	169.17735	81	664419.83926	31	219.76362	81	1316145:40778
32	199.62928	82	784015.41032	32	261.21871	82	156621303526
33	235 56255	83	925138.18418	33	311.20726	83	1863793.51196
34	277:96381	84	109166305733	34	370:33664	84	2217914.27923
35	327.99729	85	1288162-40765	35	440.70061	85-	2639317.99228
36	387.03680	86	1520031.64103	36	524:43372	86	3140788:41082
37	456.70343	87	1793637.33641	37	624.07613	87	3737538·2088 7
38	538.91004	88	2116492.05697	38	742.65059	88	4447670:46856
39	635.91385	89	2497460.62722	39	883.75421	89	5292727.85759
40	750.37834	90	2947003.54012	10	1051.66751	90	6298346-15053
41	885.44645	91	3477464:17734	41	1251.48433	91	7495031.91913
42	1044 82681	92	4103407.72926	42	1489°26636	92	8919087 98376
43	1232.89563	93	4842021.12053	43	1772.22696		10613714.70068
44	1454.81685	94	5713584.92223	44	2108.95009		12630320.49381
45	1716.68388	95	6742030:20823	45	2509.65060	95 1	15030081.3876 3
46	2025:68 698	96	7955595.64571	46	2986.48422		17885796.85128
47	2390.31063	97	9387602.86194	47	3553.91622	97 2	21284098-25302
48	2820.56655		11077371.37708	48	4229 16030	98 2	25328076.92110
49	3328 26853	99	1 307 1 298 22496	49	5032.70076		30140411.23611
50	3927:35686	100	15424131.90545	50	5988 ·91390	100	35867089-72797

THE ENGINEER'S VALUING ASSISTANT.

Years	20 per cent.	Years	20 per cent.	Years	21 per cent.	Years	21 per cent.
1	1'20	51	10920-52578	1	1'21	51	16674.54093
2	1.440	52	13104.63094	2	1.4641	52	20176'19453
3	1.7280	53	15725.55712	3	1.77156	53	24413.19538
4	2.07360	54	18870.66855	4	2.14359	54	29539.96641
Ē	2.48832		22644*80226		2.59374	55	35743'35935
6	2.98598	55	27173'76271	5		56	43249.46482
~		1 30	271/3/02/1	-	3.13843	50	
7 8	3.28318	57	32608-51525	7 8	3.79750	57	52331.85243
	4.29982	58	39130-21830		4.59497	58	63321.24144
9	5.15978	59	46956.26196	9	5.22005	59	76619.06514
10	6.19174	60	56347.51435	10	6.72750	60	92709 06882
11	7.43008	61	67617:01722	11	8-14027	61	112177'97327
12	8.91610	62	81140-42067	12	9.84973	62	135735:34766
13	10.69932	63	97368-50480	13	81816-11	63	164239 77066
14	12.83918	64	116842.20576	14	14.42099	64	198730-12250
15	15.40702		140210.64692	15	17.44940	65	240463 44823
16 l	18.48843	65	168252.77630	16	21.11378	66	290960 77236
17	22.18611	67	201903:33156	17	25.24767	67	352062.53455
18	26.62333	68	242283.99787	18		68	425995.66681
				11 1	30.91268		
19	31.94800	69	290740 79744	19	37.40434	69	515454.75684
20	38.33760	70	34888895693	20	45.25926	70	623700.25577
21	4600512	71	418666 74832	21	54.76370	71	754677:30949
22	55.50614	72	50240009798	22	66.26408	72	913159.54448
23	66.24737	1 73	60288011758	23	80.17953	73	1104923.04882
24	79.49685	74	723456-14109	24	97.01723	74	1336956.88997
25	95.39622	75	868147.36931	25	117.39085	75	1617717.83578
26	114.47546	76	1041776.84318	26	142.04293	76	1957438.58129
27	137:37055	77	1250132.21181	27	171.87195	77	2368500.68336
28	164.84466	78	1500158.65417	28	207.96506	78	2865885.82686
29			1800190 38501		251.63772		
30	197·81359 237·37631	79 80	2160228.46201	29 30	304.48164	79 80	3467721 [.] 85051 4195943 [.] 43911
	284.85158	81	2502274:15441	27	368:42278	81	F0770011761.00
31		82	2592274.15441	31		82	5077091.56133
32	341.82189	83	3110728'98529	32	445.79157		6143280 78921
33	410.18622		3732874.78235	33	539.40780	83	743336975494
34	492.22352	84	4479449 73882	34	652 68344	84	8994377:40348
35	590.66823	85	5375339.68659	35	789.74696	85	1088319665821
36	708:80187	86	6450407.62391	36	955.59382	86	13168667.95643
37	850.26225	87	774048914869	37	1156.56853	87	15934088-22728
38	1020.67470	88	9288586-97843	38	1399.08491	88	19280246 75501
39	1224.80964	89	11146304.37411	39	1692.89274	89	23329098.57356
40	1469 77 157	90	13375565 24893	40	2048.40021	96	28228209.27401
41	1763:72588	91	16050678-29872	41	2478:56426	91	34156133'22154
42	2116.47106	92	19260813.95847	42	2999.06275	92	41328921.19807
43	2539·7652 7	93	23112976.75016	43	3628.86593	93	50007994 64967
	3047.7,1832	94	27735572.10019	44	4390.92778	1	60509673.25610
44						94	
45	3657.26199	95	33282686.52023	45	5313.02261	95	73216704.96658
46	4388.71439	96	39939223.82427	46	6428.75736	96	88592213.00956
47	5 266·45726	97	47927068.58913	47	7778.79641	97	10719657774156
48	6319 74872	98	57512482.30695	48	9412:34365	98	12970785906729
49	7583.69846	99	69014978 76834	49	11388.93582		156946509.47142
50	9100:43815	100	82817974.52201	50	13780.61234	100	189905276.46042

Amount of £1 in n years at the following rates per cent.

Years	22 per cent.	Year	22 per cent.	Year	23 per cent,	Year	23 per cent.
1	1'22	51	25371.80497	1	1'23	51	38473'41024
2	1.4884	52	30953'60207	2	1.2129	52	47322'29460
3	1.81585	53	37763:39452	3	1.86087		58206.42235
4	2'21553	54	46071.34132	4	2.28887	54	71593.89950
5	2'70271	55	56207 03641	1 7	2.81531		
6	3.59730	56		5		55	88060-49638
7	4'02271	30	68572.58441	0	3'46283	56	108314.41055
7		57 58	83658-55299	8	4.25928	57	13322672497
	4.90771		102060.43464	0	5.53801	58	163868-87172
9	5.98740	59	124517:39026	9	6.44386	59	20155871221
20	7.30463	60	151911.51915	10	7.92595	60	247917.21602
11	8.91165	61	185331.68367	11	9'74891	61	304938-17571
12	10.87221	62	226104.65408	12	11.99116	62	375073'95612
13	13.26410	63	275847.67797	13	14'74913	63	461340'96603
14	16.18220	64	33653416713	14	18-14143	64	567449'38821
15	19.74229	65	410571.68369	15	22:31396	65	697962 74750
16	24.08559	66	500897:45435	16	27.44617	66	858494 17943
17	29.38442	67	611094.89431	17	33.75859	67	1055947.84070
18	35.84899	68	745535*77105	18	41.2331	68	1298815.84406
19	43:73577	69	909553.64069	19	51.07368	69	1597543'48819
20	53.35764	70	1109655.44164	20	62.82062	70	1964978.49048
						1.0	19049/0 49040
2I 22	65°09632 79°41751	71	1353779.63880	2I 22	77.26936	71	2416923.24329
		72	1651611.15933	1 1	95.04132	72	2972815.95824
23	96.88936	73	2014965-61439	23	116.90082	73	3656563.62864
24	118.20202	74	2458258 04955	24	14378801	74	4497573.26322
25	144.51013	75	2999074.82045	25	176.85925	75	5532015.11376
26	175.93636	76	3658871.58095	26	217.53688	70	6804378.58993
27	214.64236	77	4463822.96276	27	267.57036	77	8369385.66561
28	261.86368	78	5445864.01457	28	329.11155	78	10294344.36870
29	319:47368	79	6643954 09778	29	404.80720	79	12662043.59351
30	3 89·75789	80	8105623.99929	30	497.91286	80	15574313.59541
31	475.50463	81	9888861 27913	31	612:43282	81	19156405.72236
32	580.11262	82	12064410 76054	32	753:29237	82	23562379.03850
33	707:74109	83	14718581-12786	33	926.54961	83	28981726.21735
34	863.44413	84	17956668-97599	34	1139.65602	84	35647523'24734
35	1053.40184	85	21907136.12071	35	1401.77690	85	43846453.59423
36	1285.15025	86	26726706.10386	36	1724.18559	86	53931137'92091
37 I	1567.88330	87	32606581.44671	37	2120.74828	87	66335299 64272
38	1912.81763	88	39780029.36499	38	2608.52038	88	81592418.56054
39	2333.63751	89	48531635.82529	39	3208.48007	1 1	100358674.82947
50	2847.03776	90	59208595.70685	10	3946.43049	1 - 1	123441170.04024
41	3473·3860 7	91	72234486-76236	41	4854.10950	91	151832639114950
42	4237.53100	92	88126073.85007	42	5970.55469		186754146.15388
43	5169.78782		107513810 09709		734378226		
				43			229707599.76928
44	6307.14114		131166848.31845	44	9032.85218		282540347.71621
45	7694.71219		160023554.94851	45	11110.40819		347524627.69094
46	9387·54887 11452·80963		195228737:03718	46	13665.80207		127455292:05986
47			238179059118536	47	16808.93654		25770009:23362
48	13972.42774	98	290578452*20614	48	20674.99195	98 6	646697111:35736
49	17046.36185	99	354505711.69149	49	25430'24010		95437446 96955
50	20796.56145	100	432496968.26362		31279.19532		78388059.77254

Years	24 per cent.	Years	24 per cent.	Years	25 per cent.	Years	25 per cent.
1	1.54	51	58144.13892	1	1.52	51	87581-15402
2	1.5376	52	72098 73226	2	1.2622	52	109476-44253
3	1.90662	53	89402.42801	3	1.95313	53	136845.55316
4	2.36421	54	110859.01073	4	2.44141	54	171056 94145
Ė	2.93163	55	137465-17330	5	3.05176	55	213821.17681
<u>5</u>	3.63522	36	170456.81489	5	3.81470	56	267276.47101
	4.20767	57	211366.45047		4.76837	57	334095.58876
7 8	5.28921	58	262094.39858	7 8	5.96046	58	417619.48595
9			324997 05424	9	7.45058	59	522024'35744
10	6·93099 8·59443	59 60	402996:34726	10	9.31323	60	652530.44680
11	10.65709	61	499715:47060	11	11-64153	61	815663705850
12	13.51479	62	619647.18355	12	14.55192	62	1019578-82312
13	16.38634	63	768362.50760	13	18.18989	63	1274473.52891
14	20.31906	64	952769.50942	14	22.73737	64	1593091.91113
15	25.19563	65	1181434.19168	15	28.42171	65	1991364.88892
16	31.54520	66	1464978.39769	16	35.2714	66	2489206-11114
17	38.74081	67	1816573.51313	17	44.40892	67	3111507.63893
18	48.03860	68	2252550.78428	18	55.21112	68	3889384.54866
10	59.56786	69	279316297251	19	69:38894	69	486173068583
20		70		20	86.73617	70	
20	73.86415	70	346352208591	20	86.73617	70	6077163:35729
2 I 22	91.59155	71	4294767:38653	21	108.42022	71	7596454.19661
	113.57352	72	5325511.55930	22	135.52527	72	9495567.74576
23	140.83116	73	6603634.33353	23	169.40659	73	1186945968220
24	174.63064	74	8188506.57358	24	211.75824	74	14836824-60275
25	216.54199	75	10153748-15124	25	264.69780	75	18546030.75344
26	268.51207	76	12590647.70754	26	230.87225	76	23182538.44180
27	332.95497	77	15612403.15735	27	413.59031	77	2897817305225
28	412.86416	78	1935937991512	28	516.98788	78	36222716.31231
29	511.95156	79	24005631 09474	29	646.23485	79	45278395.39414
30	634.81993	80	29766982.55748	30	807:79357	80	56597994.24267
31	787.17672	81	36911058-37128	31	1009:74196	81	70747492.80334
32	97609913	82	45769712.38038	32	1262-17745	82	8843436600418
33	1210.36292	83	56754443.35168	33	1577.72181	83	110542957.50522
34	1500.85003	84	70375509:75608	34	1972.15226	84	138178696.88152
35	1861.05403	85	87265632.09754	35	2465.19033	85	172723371.10191
36	2307.70699	86	108209383.80094	36	3081.48791	86	215904213.87738
37	2861.55667	87	134179635.91317	37	3851.85989	87	269880267:34673
, 38	3548.33027	88	166382748.53233	38	4814.82486	88	337350334.18341
39	4399.92954	89	206314608.18009	39	6018.53108	89	421687917.72926
40	5455.91262	90	255830114.14331	40	7523.16385	90	527109897.16158
41	6765.33165	91	317229341.53771	41	9403'95481	91	658887371.45197
42	8389.01125	92	393364383.50676	42	11754.94351	92	823609214.31497
43	10402.37395	93	487771835.54838	43	14693 67939	93	1029511517 89371
44	12898-94370	94	604837076.07999	44	18367 09923	94	1286889397.36713
45	15994.69019	95	749997974'33919	45	22958-87404	95	1608611746.70892
46	19833.41583	96	929997488 18060	46	28698.59255	96	2010764683.38615
47	24593.43563	97	1153196885.34394	47	35873.24069	97	2513455854-23268
48	30495.86018	98	1429964137.82648	48	44841.55086	98	3141819817.79085
49	37814.86662	99	1773155530 90484	49	56051.93857	99	3927274772.23857
	46890.43461		2198712858-32200		70064.92322		4909093465.29821

TABLE II.

		•	

Amount of £1 in n years at the rate of 3 per cent. Payable by half-yearly and quarterly instalments.

	Amount of £1 in n	Amount of £1 in n			Amount of £r in n	Amount of £r in a	
ears	years at 3 per cent. Payable half-yearly.	Payable quarterly.	Years	Years	years at 3 per cent. Payable half-yearly.	years at 3 per cent, Payable quarterly.	Yec
	Ratio = o'o15	Ratio = 0'0075		13	Ratio = 0'015	Ratio = 0'0075	
oł	***	1 007 5000000	여	1		1.4858942602	Ι.
	1.0120000000	10150562500		li	1.4948001774	1.4970384672	
-touste	. 0.300000	10226691719	9	3	1 4940001//4	1.2082662222	
1	1.0302250000	1 0303391907	1	19	1.2172221801	1.21922822337	129
4	1 0302230000	10380667346		,	1 31/2221001		
1	1:04 = 6 = 8 = = = 0			1	***********	1.5309750895	1
9034	1.0456783750	1.0458522351	3		1.5399805128	1.5424574027	1
	*************	1 05 3 69 6 1 2 69				1.5540258332	نے ا
2	1.0613635506	1.0615988478	2	15	1.2630802205	1.2626810269	15
4	••••	1.0695608392	1 4	1 1		1.5774236346	1 :
9034	1.0772840039	10775825455	1	1	1.5865264238	1.2892243119	1
		1 0856644146		- 2		1.6011737192	1 :
3	1.0934432639	10938068977	3	16	1.6103243202	1.6131825221	16
4-5034	••• •••	1.1020104404	1 1	1 1	•••	16252813911	: ا
4	1.1008440150	1.1102755278	1 1	1	1 6344791850	1.6374710015	
3		1.1186025942	1 3	3	•••	1 6497520340	1 :
\$.	1.1264925866	1.1269921137	•	17	1.6589963727	1.6621251743	17
ł		1.1354445545	1 1	1	•••	1 6745911131	1 :
934	1.1433899754	1.1439603887		te-fourie	1.6838813183	1.6871505464	
3		1.1525400916	3	3		1 6998041755	
5	11605408250	1.1611841423	5	18	17091395381	1.7125527068	128
		1.1698930234		1	., ., .,,	1.7253968521	
4-6034	1.1779489374	1.1786672210	410004	I	1.7347766312	1.7383373285	Ι.
ş	///	1.1875072252	Į Š	1 1	- / 54/ / 005-2	1.7513748585	
6	1.1956181712	1.1964135294	6	19	1.7607982806	1.7645101699	19
	- 1930101713	1.5023866300		1	1,00,902000	1.7777439962	,
1	1.5135524440	1.5144520300	1 1	1	1:7872102548	1.7910770762	
7	. 2133324440	1.51445/0300	Tá Toura	3	1./0/2102540	1.8045101542	1
7	1.5317557307	1.5332112426	7	20	1.8140184087	1.8180439804	20
'n	231/33/30/	1 7 7 7 27			1 0140104007		-
-te-toware	1.2502320667	1.2419570857	10014	1	1.8412286848	1.8316793102	
3	1 2502520007	1.2512717638	1 3	3	1 0412200040	1.8454169051	
8	1:06808 = 1.47	1.2606563021			0600	1.8592575319	
	1.2689855477	1.2701112243	8	21	1.8688471151	1.8732019633	21
1	*00	1.2796370585	1	4		1.8872509781	
- Person	1.5880503300	1.5895343364	1	1	1.8968798218	1.9014053604	
		1.2989035940			•••	1.9156659006	
9	1.3073406358	1.3086453709	9	22	1.9253330191	1.9300333949	22
4		1.3184602112	1	1 4	•••	1:9445086453	
3	1.3269507454	1.3283486628	ā	-tous:14	1 9542130144	1 9590924602	
4		1.3383112778	3			1.9737856536	
0	1.3468550065	1.3483486153	10	23	1.9835262096	1 9885890460	23
4		1.3584612269	1	1	•••	20035034639	
ş	1.3670578316	1.3686496861	Į.	į	20132791028	2.0185297398	
3	•••	1.3789145588	3	3	•••	20336687129	
3	1.3822636991	1.3892564180	11	24	20434782893	2.0489212282	24
1		1.3996758411	1	1	•••	2.0642881375	1
ā	1.4083771546	1.4101734099	į		20741304637	2.0797702985	
<u> </u>		1.4207497105	1 3	934		2.0953685757	
2	1.4295028119	1.4314053333	12	25	2.1052424206	2.1110838400	28
1		1.4421408733	1	1		2.1269169688	-
ì	1.4509453541	1.4529569299	1		2.1368210569	2.1428688461	
3	~ TJ- JTJJJT•	1.4638541068	3	5		2.142000401	
3	1.4727095344	1.4748330126	13	26	2.1688733728		20
	- 4/4/2773744	1 - 4/40330120		1 40	2 1000/33/20	2.1751324122	-9
						E 2	

Amount of £1 in n years at the rate of 3 per cent. Payable by half-yearly and quarterly instalments.

	Amount of £r in # years at 3 per cent.	Amount of £r in # years at 3 per cent.	Yeem	Years	Amount of £1 in n years at 3 per cent. Payable half-yearly.	Amount of £r in n years at 3 per cent.	Year
CATE	years at 3 per cent. Payable half-yearly. Ratio = 0.015	Payable quarterly. Ratio = 0.0075		20013	Payable half-yearly. Ratio = o'or5	Payable quarterly. Ratio = 0'0075	
1		2.1914459083	1	1	•••	3.2320167709	1
te-toward	2.2014064734	2.2078817526	į	Ī	3.2420323025	3.2562568967	Ī
\$		2.2244408657	3	1	•••	3.2806788235	1
17	2.2344275705	2.2411241727	27	40	3.2906627870	3.3052839146	40
4	511-757-5	2 2579326035	1	1	•••	3.3300735440	1
i	2.2679439840	2.2748670980	1 7	į	3.3400227288	3.3550490956	1 1
3		2.2919286013	200	3	•••	3.3802119638	1 1
8	2.3019631438	2.3091180658	28	41	3.3901230697	3.4055635535	61
1		2.3264364513	1	1	•,•	3.4311052802	1 4
į	2.3364925909	2.3438847247	1	1	3.4409749158	3.4568385698	1 1
3		2.3614638601	3	3	•••	3.4827648590	1 1
29	2.3715399798	2.3791748391	29	42	3.4925894395	3.5088855955	42
1		2.3970186504	1 1	1	•••	3.5352022375	4
j	2.4071130795	2.4149962902	1	1	3.5449783826	3.5617162542	}
3		2.4331087624	3	3	•••	3.5884291261	1 4
30°	2:4432197757	2.4513570781	30	43	3.5981530583	3.6153423446	43
1		2.4697422562		1	•••	3.6424574122	1 4
į	2.4798680723	2.4882653231	1	<u> </u>	3.6521253542	3.6697758428	1 1
3		2.2069273131	3	3		3.697299 1616	4
31	2.5170660934	2.5257292679	31	44	37069072345	3.7250289053	65
1		2.5446722374	1	1	•••	3.7529666221	1 4
į	2.5548220848	2.5637572792	1 .1	j.	3.7625108430	3.7811138717	
3		2.5829854588	100	3	•••	3.8094722258	1
32`	2.5931444161	2.6023578497	32	45	3.8189485057	3.8380432675	45
1		2.6218755336	1 1	1		3.8668285920	1 1
į.	2.6320415823	2.6415396001	Į	l g	3.8762327333	3.8958298064	1 1
DIST.		2.6613511471	1 2	1		3.9250485300	1 4
33	2.6715222061	2.6813112807	33	46	3.9343762243	3.9544863939	16
1		2.7014211153		‡		3.9841450419	1 1
1	2.7115950391	2.7216817737	1	1	3.9933918676	4.0140261297	1 1
3		2.7420943870	7	3	•••	40441313257	1 _ 3
4	2.7522689647	2.7626600949	34	47	4.0532927457	4.0744623106	67
1		2.7833800456	1	4		4.1050207780	1 4
j.	2.7935529992	2.8042553959	1	Pleast.	471140921368	4.1358084338	{
3		2.8252873114	- 4			4.1668269971	ا ا
15	2.8354562942	2.8464769662	35	48	4.1758035189	4.1980781995	48
4		2.8678255435	1 1	†		4.2295637860	1
34	2.8779881386	2.8893342351	1	1	4.2384405717	4.2612855144	1
		2.9110042418	3	4	*** ***	4.2932451558	آم ا
36	2.9211579607	2.9328367736	36	49	4.3020171803	4.3254444944	49
4		2.9548330494	1 1	1		4.3578853282	1 3
1	2.9649753301	2.9769942973	3	1	4.3665474380	4.3905694681]
		2.9993217545	1	-3	4.4200456465	4.4234987391	-
37	3.0094499600	3.0218166677	37	50	4.4320456495	4.4566749797	50
4		3.0444802927	1	1	4.4985263343	4·4901000420 4·5237757923	3
ģ	3.0545917094	3.0673138949	3	1	4 4505203343	4.5577041108]
*		3.0903187491	38	51	4.5660042293	4.2018868016	51
88	3.1004102821	3.1134961397	- J		4 5000044493	4.6263260433	} ~~
1	60.67.50	3.1368473608	1	1	4.6344942927	4.6610234886	1 3
\$	3.1469167439	3.1603737160	1	3	4 234434-92/	4.6959811648]
4	1	3.1840765189	1 4	11 T	****	- 07770110HO	1 4

TABLE IL

Amount of £1 in n years at the rate of 3 per cent. Payable by half-yearly and quarterly instalments.

Years	Amount of £1 in a years at 3 per cent Payable half-yearly. Ratio = c'ors	Amount of £1 in n years at 3 per cent. Payable quarterly. Ratio = 0'0075	Years	Years	Amount of £1 in n years at 3 per cent. l'ayable half-yearly. Ratio = 0'015	Amount of £2 in x years at 3 per cent. Fayable quarterly. Batio = 00075	Years
53 53	 4 [,] 7745718827 4 [,] 8461904610	4·7666850312 4·8024351689 4·8384534327 4·8747418334	74-balle 53	65	6·8252639321 6·9276428911	6.8230583759 6.8742313137 6.9257880485 6.9777314589	65
1 1 1 1 1 1 1	4·9188833179 	4°9113023972 4°9481371652 4°9852481939 5°0226375554	54.	66	 7°0315575345 7°1370308975	7°0300644449 7°0827899282 7°1359108527 7°1894301840	56 66
55 55	5.0675565662 5.1435699146	5°0603073370 5°0982596421 5°1364965894 5°1750203138	14-10-14- 85	67	7·2440863609 7·3527476563	7·2433509104 7·2976760423 7·3524086126 7·4075516772	67
56	5.2207234634 5.2990343153	5 ² 138329661 5 ² 529367134 5 ² 923337387 5 ³ 320262418	56	68	7·4630388712 7·5749844543	7.4631083147 7.5190816271 7.5754747393 7.6322907999	58 58
1 1 2 57	5·37851983∞ 5·4591976275	5·3720164386 5·4123065619 5·4528988611 5·4937956026	57	69	7.6886092211 7.8039383594	7.6895329809 7.7472044782 7.8053085118 7.8638483256	69
58	5.5410855919 5.6242018758	5·5349990696 5·5765115626 5·6183353993 5·6604729148	58	70	 7 ⁹ 209974348 8 ⁰ 398123963	7°9228271881 7°9822483920 8°0421152549 8°1024311193	70
14 mile 59	5.7085649039 5.7941933775	57029264617 57456984101 57887911482 58322070818	59	72	8·1604095822 8·2828157260	8·1631993527 8·2244233479 8·2861065230 8·3482523219	71
60	5·8811062781 5·9693228723	5.8759486349 5.9200182497 5.9644183866 6.0091515245	60	72	8·4070579619 8·5331638313	8:4108642143 8:4739456959 8:5375002886 8:6015315408	72
61	6·0588627154 6·1497456561	6.0542201609 6.0996268121 6.1453740132 6.1914643183	61	73	8.6611612888 8.7910787081	8.6660430274 8.7310383501 8.7965211377 8.8624950462	73
62	6·2419918410 6·3356217186	6·2379003007 6·2846845529 6·3318196871 6·3793083347	62	74	8·9229448887 9·0567890621	8·9289637591 8·9959309873 9·0634004697 9·1313759732	74
63	6·4306560444 6·5271158850	6.4271531473 6.4753567959 6.5239219718 6.5728513866	63	75	9·1926408980 9·3305305115	9·1998612930 9·2688602527 9·3383767046 9·4084145299	75
54	6·6250226233 6·7243979627	6.6221477720 6.6718138803 6.7218524844 6.7722663780	64	76	9·4704884691 9·6125457962	9·4789776389 9·5500699711 9·6216954959 9·6938582121	76

Amount of £1 in n years at the rate of 3 per cent. Payable by half-yearly and quarterly instalments.

Years	Amount of £1 in s years at 3 per cent. Payable half-yearly. Ratio = 0'015	Amount of £1 in n years at 3 per cent. Payable quarterly, Ratio = 0'0075	Years	Years	Amount of £r in s years at 3 per cent. Payable half-yearly. Ratio = o'ors	Amount of £r in s years at 3 per cent. Payable quarterly. Ratio ≈ 0'0075	Years
77	9.7567339831 9.9030849929	9·7665621487 9·8398113649 9·9136099501 9·9879620247	77	89	13 ⁻ 9472786641 14 ⁻ 1564878441	13 9799091478 14 0847584665 14 1903941550 14 2968221111	89
78	10.0516312677	10°0628717399 10°1383432779 10°2143808525 10°2909887089	78	90	 14·3688351617 14·5843676891	14·4040482769 14·5120786390 14·6209192288 14·7305761230	90
79	10.3554418228	10·3681711242 10·4459324077 10·5242769007 10·6032089775	79	91	14.8031332045 15.0251802025	14.8410554440 14.9523633598 15.0645060850 15.1774898806	91
- Tensore	10.6684350519	10.6827330448 10.7628535427 10.8435749442 10.9249017563	80	92	 15 ² 505579056 15 ² 4793162742	15:2913210547 15:4060059626 15:5215510074 15:6379626399	92
B1	10.0204813777	11 0068 38 5 1 9 5 11 08 9 3 8 9 8 0 8 4 11 17 2 5 6 0 2 3 1 9 11 2 5 6 3 5 4 4 3 3 7	81	93	157115060183	15.7552473597 15.8734117149 15.9924623028 16.1124057700	93
\$2 82	 11 [.] 3230881063 11 [.] 4929344279	11·3407770919 11·4258329201 11·5115266670 11·5978631170	82	94	16·1863862877 16·4291820820	16·2332488133 16·3549981794 16·4776606658 16·6012431208	- trade
	11.6653284443 11.8403083710	11 6848470904 11 7724834436 11 8607770694 11 9497328974	83	95		16·7257524442 16·8511955875 16·9775795544 17·1049114011	95
alcod-at-	12.1981816915	12.0393558942 12.1296510634 12.2206234463 12.3122781222	84	96	17·1796404221 17·4373350284	17.2331982366 17.3624472233 17.4926655775 17.6238605693	96
de-forde 65	12·3811544169 12·5668717331	12.4046202081 12.4976548597 12.5913872711 12.6858226757	85	97	17.6988950538 17.9643784796	17.7560395236 17.8892098200 18.0233788937 18.1585542354	97
36	 12·7553748091 12·9467054313	12·7809663457 12·8768235933 12·9733997703 13·0707002685	86	98	 18·2338441568 18·5073518192	18·2947433922 18·4319539676 18·5701936224 18·7094700745	98
4 4 2 3 4	 13 ¹ 1409060127 13 ¹ 3380196029	13·1687395206 13·2674959995 13·3670022195 13·4672547361	14 10 may 4 87	99		18.8497911001 18.9911645333 19.1335982673 19.2771002543	99
S S		13·5682591466 13·6700210902 13·7725462484	atade at	-tabuda	 19 [.] 3527375758 19 [.] 6430286395	19·4216785063 19·5673410950 19·7140961533	100

TABLE III.

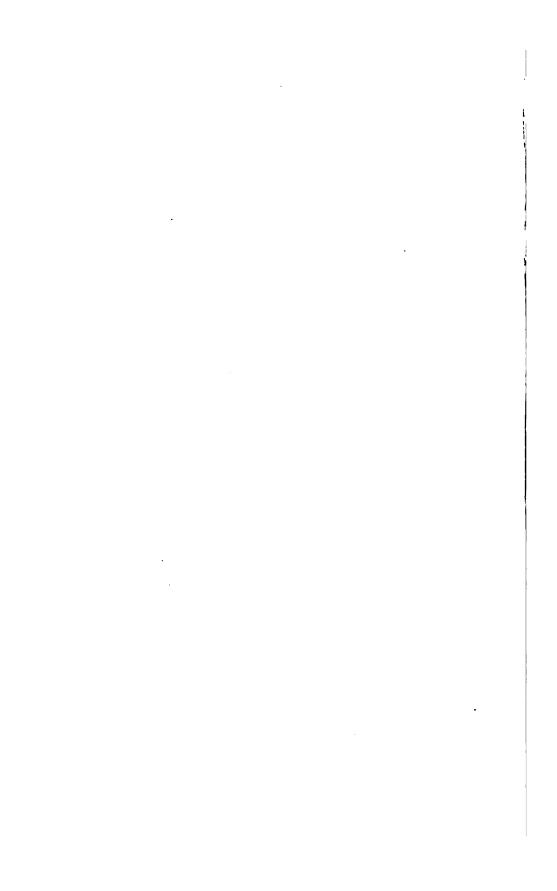


TABLE III.

Amount of £1 per annum in n years at the following rates per cent.

Years	per cent.	Years	≩ per cent.	Years	per cent.	Years	į per cent.
1	1.	51	57.9283888021	1	I.	51	61.8472142443
2	2005	52	59.2180307461	2	20075	52	63.3110683512
3	3015025	53	60.5141208998	3	302255625	53	64.7859013638
4	4030100125	54	61.8166915043	4	40452254219	54	66.2717956241
	50502506256	55	63.1257749619		50755646125	55	67.7688340912
5	60755018788	56	64.4414038367	5	6.1136313471	56	69.2771003469
	7.1058793881	57	657636108559	7	7.1594835822	57	70.7966785995
7 8	8.1414087851	58	670924289101	7 8	8.2131797091	58	72.3276536890
9	9.1821158290	59	68-4278910547	9	9.2747785569	59	73.8701110917
1ó	10-2280264082	60	69.7700305100	1ó	10.3443393961	60	75.4241369249
11	11-2791665402	61	71-1188806625	11	11:4219219416	61	76.9898179518
12	12.3355623729	62	72.4744750658	12	12.5075863561	62	78.5672415865
13	13.3972401848	63	73.8368474412	13	136013932538	63	80-1564958984
14	14.4642263857	64	75.2060316784	14	14.7034037032	64	81.7576696176
15	15.5365475176	65	76.5820618368	15	15.8136792310	65	83-3708521398
16	166142302552	66	77.9649721460	16	16.9322818252	66	84.9961335308
17	17:6973014065	67	79.3547970067	17	180592739389	67	86.6336045323
18	187857879135	68	80.7515709917	18	19.1947184934	68	88 2833565663
19	19.8797168531	69	82-1553288467	19	20.3386788821	69	89.9454817406
20	20.9791154374	7Ó	83.2661024909	20	21.4912189738	70	91 62007 285 36
21	220840110146	71	84.9839360184	21	22.6524031161	71	93 3072234000
22	23.1944310696	72	86.4088556985	22	23.8222961394	72	95.0070275755
23	24.3104032250	73	87.8408999770	23	25.0009633605	73	96.7195802824
24	25.4319552411	74	89.2801044769	24	26.1884705857	74	98.4449771345
25	26.5591150173	75	90.7265049993	25	27.3848841151	75	100.1833144630
26	27.6919105924	76	92.1801375243	26	28.5902707459	76	101-9346893215
27	28.8303701454	77	93.6410382119	27	29.8046977765	77	103.6991994914
28	29.9745219961	78	95.1092434030	28	31 0282330098	78	105.4769434876
29	31.1243946061	79	96.5847896200	29	32.2609447574	79	107.2680205637
30	32.2800165791	80	98.0677135681	30	33.2029018431	80	109 07 25 307 180
31	33.4414166620	81	99.5580521359	31	34.7541736069		110.8905746984
32	34.6086237453	82	101.0558423966	32	360148299090		112.7222540086
33	35.7816668640	83	102:5611216086	33	37.2849411333	83	114.5676709137
34	36.9605751984	84	104 07 39272 166	34	38.5645781918	84	116.4269284455
35	38.1453780744	85	105.5952968527	35	39.8538125282	85	118.3001304089
36	39.3361049647	86	107.1222683370	36	41.1527161216	86	120 1873813869
37	40 5327854896	87	108.6578796787	37	42.4613614925	87	122.0887867473
38	41.7354494170	88	110.5011600221	38	43.7798217037	88	124 0044526480
39	42.9441266641	89	111.7521749224	39	45.1081703665	89	125.9344860428
40	44 1 588472974	90	113.3109327971	40	46.4464816442	90	127.8789946881
41	45 3796415339		114.8774904760	41	47.7948302566		129.8380871483
42	46.6065397416	92	116.4518779284	42	49.1532914835	92	131.8118728019
43	47.8395724403	93	118 0341 373181	43	50.5219411696	93	133.8004618479
44	49.0787703025	94	119.6243080047	44	51.9008557284	94	135.8039653118
45	50.3241641540	95	121-2224295447	45	53.2901121464	95	137.8224950517
46	51.5757849748		122.8285416924	46	54.6897879875	96	139.8561637645
47	52.8336638996	97	124.4426844009	47	56 099961 3974	97	141.9050849928
.48	54.0978322191	98	126-0648978229	48	57.5207111079	98	143.9693731302
49	55.3683213802		127.6952223120	49	58.9521164412	99	146 0461434287
50			129.3336984235				148-1445120044

Years	1 per cent.	Ycars	1 per cent.	Years	14 per cent.	Years	11 per cent.
	I.	51	66.1078140061	1	· 1.	51	70.7428122595
2	2.01	52	67.7688921462	2	2.0125	52	72.6270974128
3	3.0 01	53	69.4465810676	3	3·03765625	53	74.5349361304
4	4.060401	54	71.1410468783	4	4.0756269531	54	76.4666228320
5	5.10100201	55	72.8524573471		5.1265722900	55	78.4224556174
6	6.120120601	56	74.5809819206	5	6.1906544437	56	80.4027363127
7	7-2135352107	57	76.3267917398	7	7.2680376242	57	82.4077705166
7 8	8.2856705628	58	78.0900596571	8	8.3588880945	58	84.4378676480
9	9.3685272684	59	79.8709602537	9	9.4633741957	59	86.4933409936
3ó	10.4622125411	6 ó	81.6696698563	1ó	10.2816663731	60	88.5745077560
11	11.5668346665	61	83.4863665548	111	11.7139372028	61	90.6816891030
12	12.6825030132	62	85.3212302204	12	12.8603614178	62	92.8152102168
13	13.8093280433	63	87.1744425226	13	14.0211159356	63	94.9754003445
14	14.9474213238	64	89.0461869478	14	15.1963798848	64	97.1625928488
15	16 0968955370	65	90.9366488173	15	16.3863346333	65	99.3771252594
16	17.2578644924	66	92.8460153054	16	17.5911638162	66	101-6193393252
17	18.4304431373	67	94.7744754585	17	18.8110533639	67	103.8895810667
18	19.6147475687	68	96.7222202131	18	20.0461915310	68	106.1882008300
19	20.8108950443	69	98 6894424152	19	21.2967689251	69	108.5155533404
20	22.0190039948	7Ó	100.6763368393	2ó	22.5629785367	7Ó	110.8719977572
71	23.2391940347	71	102.6831002077	21	23.8450157684	71	113.2578977291
22	24.4715859751	72	104.7099312098	22	25.1430784655	72	115.6736214508
23	25.7163018348	73	1067570305219	23	26.4573669463	73	118-1195417189
24	26.9734648532		108.8246008271	24	27.7880840331	74	120.5960359904
25	28.2431995017	75	110 9128468354	25	29.1354350836	75	123.1034864403
26	29.5256314967		113.0219753037	26	30.4996280221	76	125.6422800208
27	30.8208878117		115-1521950568	27	31.8808733724	77	128.2128085210
28	32.1290966898	78	117.3037170074	28	33.2793842895	78	130.8154686275
29	33.4503876567	79	119.4767541774	29	34.6953765932	79	133 4506619854
30	34.7848915333	80	121.6715217192	30	36.1290688006	80	136.1187952602
31	36.1327404486	81	123.8882369364	31	37.5806821606	81	138-8202802010
32	37.4940678531	82	126-1271193058	32	39.0504406876	82	141.5555337035
33	38.869co85316	83	128.3883904988	33	40.5385711962	83	144.3249778748
34	40.2576986169	84	130.6722744038	34	42.0453033361	84	147 1290400982
35	41.6602756031	85	132.9789971478	35	43 5708696278	85	149 968 1 5 3 0 9 9 4
36	43.0768783591	86	135.3087871193	36	45.1155054982	86	152.8427550132
37	44.5076471427	87	137.6618749905	37	46 6794493169	87	155.7532894508
38	45.9527236141	88	140 0384847404	38	48.2629424334	88	158.7002055690
39	47.4122508503	80	142.4388786778	39	49.8662292138	89	161·683958138 6
40	48.8863733588	9ó	144 8632674646	40	51.4895570789	9ó	164.7050076153
41	50.3752370923	91	147:3119001393	41	53.1331765424	91	167.7638202105
42	51.8789894633	92	149.7850191406	42	54.7973412492	92	170.8608679631
43	53.3977793579	93	152.2828693321	43	56.4823080148	93	173.9966288127
44	54.9317571515		154.8056980254	44	58.1883368650		177-1715866728
45	56.4810747230		157.3537550056	45	59.9156910758	95	180-3862315062
46	58.0458854702		159.9272925557	46	61.6646372143	96	183.6410594001
47	59.6263443249	97	162.5265654812	47	63.4354451794	97	186.9365726426
48	61 2226077681		165-1518311361	48	65.2283882442	98	190.2732798006
49	62.8348338458		167.8033494474	49	67:0437430972	99	193.6516957981
5ó	644631831843	-22	170.4813829419	50			197 0723419956

TABLE 111.

Amount of £1 per annum in n years at the following rates per cent.

Years	1½ per cent.	Years	11 per cent.	Years	14 per cent.	Years	13 per cent.
1	1.	51	75.7880704611	1	1.	51	81 28301 36099
2	2.012	52	77 9248915180	2	20175	52	83.7054663481
3	3 045225	53	80.0937648907	3	3.05280625	53	86.1703120092
4	4.090903375	54	82.2951713641	4	4.1062343594	54	88.6782924693
5	5.1522669256	35	84.5295989346		5.1780893907	55	91.2301625875
5	6.2295509295	56	86.7975429186	5	6.2687059550	56	93.8266904328
7	7.3229941935	57	89.0995060624		7.3784083092	57	96.4686575154
8	8.4328391064	58	91.4359986533	7 8	8.5075304546	58	99.1568590219
9	9.5593316922	59	93.8075386331	9	9.6564123376	59	101.8921040548
1ó	10.7027216683	66	96-2146517126	1ó	10.8253994517	60	104.6752158758
11	11.8632624934	61	98-6578714883	11	12.0148439241	61	107.5070321536
12	13'0412114308	62	101-1377395606	12	13.2251037111	62	110.3884052163
13	14.2368296022	63	103.6548056540	13	14.4565430261	63	113.3202023076
14	15.4503820463	64	106.2096277388	14	15.7095325290	64	116.3033058480
15	16.6821377770	65	108.8027721549	15	16.9844493483	65	119.3386137003
16	17.9323698436		111.4348137372	16	18.2816772119	66	122.4270394401
17	19.2013553913	67	114.1063359433	17	19.6016065631	67	125.5695126303
18	20.4893757221	68	116.8179309824	18	20.9446346780	68	128.7669791013
19	21.7967163580		119.5701999472	19	22.3111657848	69	132.0204012356
2ó	23.1236671033		122.3637529464	20	23.7016111861	70	135.3307582572
21	24.4705221099	71	125.1992092406	21	25.1163893818	71	138-6990465267
22	25.8375799415	72	1280771973792	22	26.5559261960	72	142.1262798409
23	27'2251436406	73	130'9983553399	23	28.0206549044	7.3	145.6134897381
24	28.6335207953		133.9633306700	24	29.5110163653	74	149.1617258086
25	30.0630236072		136.9727806300	25	31 0274591517	75	152.7720560102
26	31.2139689613		140 0273723395	26	32.5704396868	76	156.4455669904
27	32.9866784957	77	143.1277829246	27	34.1404223813	77	160.1833644137
28	34.4814786731		146.2746996684	28	35.7378797730	78	163.9865732910
29	35.9987008532		149.4688201635	29	37.3632926691	79	167.8563383235
3ó	37.5386813660		152.7108524659	30	39.0171502908	80	171.7938242442
31	39.1017615865		156.001212229	31	40.6999504209	81	175.8002161684
32	40.6882880103		159.3415379817	32	42.4121995532	82	179.8767199514
33	42.2986123305	83	162.7316610514	33	44*1544130454	83	1840245624505
34	43.9330915154	84	166-1726359672	34	45.9271152737	84	188-2449923951
35	45.5920878882		169.6652255067	35	47.7308397910	85	192.5392797620
36	47.2759692065	86	173.2102038893	36	49.5661294873	86	196.9087171579
37	48.9851087446	87	176.8083569476	37	51.4335367534	87	201.3546197081
38	50.7198853757	88	180.4604823018	38	53.3336236466	88	205.8783255530
39	52:4806836564	89	184.1673895364	39	55.2669620604	89	2104811962502
40	54.2678939112		187-9299003794	40	57*2341338964	90	215.1646171846
41	560819123199		191-7488488851	41	59:2357312396		219.9299979853
42	57.9231410047	92	195.6250816184	42	61.2723565363	92	224.7787729500
43	59.7919881198		199.5594578427		63.3446227757	93	229.7124014766
44	61 6888679416		203.5528497103	44	65.4531536743	94	234.7323685025
45	63 6142009607		207.6061424560	45	67.5985838636	95	239.8401849513
46	65.5684139751		211.7202345928	46	69.7815590812		245.0373881879
47	67.5519401847		215.8960381117	47	72.0027363651	97	250.3255424812
48	69.5652192875	98	220.1344786834	48	74.2627842515	98	255.7062354746
49-	71 6086975768		224.4364958636	49	76.5623829759	99	261-1810986654
50	72.6828280405	100	228.8030433016	50	78.0022246780	100	266.7517678920

Years	2 per cent.	Years	2 per cent.	Years	21 per cent.	Years	21 per cent,
1	ı.	51	87-2709894828	I	1.	51	93.7996641635
2	202	52	90°0164092724	2	2'0225	52	96.9101566072
3	30604	53	92.8167374579	3	3 0 6 8 0 0 6 2 5		100 0906351308
4	4.121608	54	95.6730722070	4	4.1370363906	54	103.3426744213
5	5.20404016	55	98.5865336512		5.2301197094	55	106.6678845958
5	6.3081209632	56	101.5582643242	5	6.3477974029	56	1100679119992
	7.4342833825	57	104.5894296107	7	7.4906228444	57	113.2444400192
7 8	8.2829690501	58	107.6812182029	8	8.6591618584	58	117:0991899196
9	9.7546284311	59	110.8348425670	. 9	9.8539930003	59	120.7339216928
10	10'9497209997	60	1140515394183	10	110757078428	60	124.4504349309
11	12-1687154197	61	117:3325702067	11	12:3249112692	61	128-2505697168
12	13.4120897281	62	120 6792216108	12	13.6022217728	62	132.1362075354
13	14.6803315267	63	124.0928060430	13	14.9082717627	63	136.1092722020
14	15 9739381531	64	127.5746621639	14	16-2437078773	64	140.1717308296
15	17.2934169162	65	131.1261224073	15	17.6091913046	65	144.3255947733
16	18.6392852545	66	134.7486785154	16	190053981089	66	148.5729206557
17	200120709596	67	138.4436520857	17	20.4330195664	67	152.0128113704
18	21.4123123788	68	142.5125251275	18	21.8927625066	68	157.3564171262
19	22.8405586264	69	146 0567756300	19		69	161.8969365116
					23.3853496630		
20	24.2973697989	70	149 ⁻ 9779111426	20	249115200304	70	166-5396175831
21	25.7833171949	71	153.9774693655	21	26.4720292311	71	171.2867589787
22	27.3989835388	72	158.0570187528	22	28.0676498888	72	176.1407110227
23	28.8449632096	73	162.2181591278	23	29.6991720113	73	181.1038770242
24	30.4218624738	74	166.4625223104	24	31.3674033816	74	186.1787142882
25	32:0302997232	75	170.7917727566	25	330731699577	75	191.3677353597
26	33.6709057177	76	175.3076083117	26	34.8173162817	76	196.6735094053
27	35.3443238320	77	179.7117603759	27	36.6007058980	77	202 0986633669
28	37.0512103087	78	184.3059955835	28	38.4242217808	78	207.6458832927
29	38.7922345149	79	188-9921154951	29	40.2887667708	79	213 3179156667
30	40.5680792052	80	193.7719578050	30	42.1952640232	80	219.1175687692
31	42·3794407893	81	198-6473969611	31	44.1446574637	81	2250477140666
32	44.2270296051	82	203 6203449003	32	46.1379122566		231.1112876331
33	46.1115701972	83	208 6927517984	33	48.1760152824		237.31129.16048
34	48 0338016011	84	213.8666068343	34	50.2599756262		2436507956659
35	49.9944776331	85	219.1439389710	35	52:3908250778	85	250.1329385684
36	51.9943671858	86	224.5268177504	36	54.5696186421	86	256.7609296862
37	54.0342545295	87	230 0173541054	37	56.7974350615	87	263.5380506041
38	56.1149396201	88	235-6177011875	38	59.0753773504	88	270.4676567427
39	58.2372384125	89	241.3300552113	39	61.4045733408	89	277.5531790194
40	60.4019831808	9ó	247.1566563155	40	63.7861762410	90	284.7981255474
41	62.6100228444	91	2530997894418	41	66.2213652064	91	292·2060833722
42	64.8622233013	92	259.1617852306	42	68.7113459235	92	299.7807202481
43	67.1594677673	93	265.3450209353	43	71.2573512068	93	307.5257864536
44	69.5026571226	94	271.6519213540	44	73.8606416089		315.4451166489
45	71.8927102651	95	278 0849597810	45	76.5225060451	95	323.5426317735
46	74.3305644704	96	284-6466589766	46	79.2442624312	96	331.8223409884
47	76.8171757598	97	291.3395921562	47	82.0272583359	97	340 288 34 36606
48	79:3535192750	.98	298.1663839993	48	84.8728716484	98	348.9448313930
	81.9402896602	99	305.1397116793	49	87.7825112605		357.7960900993
49							

TABLE III.

Amount of £1 per annum in n years at the following rates per cent.

Years	21 per cont.	Years	2½ per cent.	Years	2? per cent.	Years	2} per cent.
1	1.	51	100.9214575078	I	1.	51	108.6940225574
2	2.025	52	104.4444939455	2	20275	52	112.6831081777
3	3.075625	53	108 0556062941	3	3.08325625	53	116.7818936526
4	4.152515625	54	111.7569964515	4	4.1680457969	54	120.9933957281
5	5.2563285156	1.55	115.5509213628.		5.2826670563	55	125.3207141106
5	6.3877367285	56	119.4396943968	5	6.4279404003	56	129.7670337486
7	7.5474301467	57	123.4256867568	7	7.6047087613	57	134.3356271767
8	8.7361159004	58	127.5113289257	8	8.8138382523	58	139.0298569241
9	9.9545187979	59	131.6991121488	9	10.0562188042	59	143.8531779855
10	11.503381,2629	60	135.9912899525	10	11.3327648213	60	148.8091403842
11	12.4834663121	61	140-3913797014	11	12.6444158539	61	153.9013917448
12	13.7955529699	62	144.9011641939	12	13.9921372899	62	159 1336800177
13	15 1404417941	63	149.5236932987	13	15.3769210654	63	164.5098562182
14	16-5189528390	64	154.2617856312	14	16.7997863947	64	170.0338772642
15	17-9319266599	65	159.1183302720	15	18.2617805205	65	175.7098088890
16	19.3802248264	66	164 0962885288	16	19.7639794849	66	181-5418286334
17	20.8647304471	67	169.1986957420	17	21.3074889207	67	187.5342289209
18	22.3863487083	68	174.4286631356	18	22.8934448660	68	193.6914202162
19	23.9460074260	69	179.7893797139	19	24.5230145998	69	200.0179342721
20	25.2446276116	70	185.2841142068	20	26-1973975013	70	206.5184274646
	_						
21	27.1832740519	71	190.9162170620	21	27.9178259326	71	213.1976842199
22	28.8628559032	72	196.6891224885	22	29.6855661458	72	220 0606205359
23	30.5844273008	73	202.6063505507	23	31.5019192148	73	227.1122876008
24	32.3490379833	74	208.6715093145	24	33.3682219932	74	234-3578755098
25	34.1577639329	75	214.8882970474	25	35.2858480980	75	241.8027170863
26	36.0117080312	76	221-2605044735	26	37.2562089207	76	249.4522918062
27	37.9120007320	77	227.7920170854	27	39.2807546660	77	257-3122298308
28	39.8598007503	78	234.4868175125	28	41.3609754193	78	265-3883161511
29	41.8562957690	79	241.3489879503	29	43.4984022433	79	273.6864948452
30	43.9027031633	80	248-3827126491	30	45.6946083050	80	282-2128734535
31	46-0002707423	81	255.5922804653	31	47.9512100334	81	290 97 372747 34
32	48-1502775109	82	262.9820874770	32	50.2698683093	82	299.9755049789
33	50 3 5 4 0 3 4 4 4 8 7	83	270.5566396639	33	52.6522896878	83	309.2248313659
34	-52-6128853099	84	278-3205556555	34	55.1002276543	84	318.7285142284
35	54.9282074426	85	286.2785695469	35	57.6154839148	85	328-4935483697
36	57.3014126287	86	294.4355337855	36	60.1999097224	86	338-5271209499
37	59.7339479444	87	302.7964221302	37	62.8554072398	87	348.8366167760
38	62.2272966430	88	311.3663326834	38	65.5839309389	88	359.4296237373
39	64.7829790591	89	320.1504910005	39	68.3874890397	89	37.0.31 3938 3901
10	67.4025535356	9ó	329.1542532755	£Ó	71-2681449883	9ó	381.4975716958
41	70 0876173740	91	338-3831096074	41	74-2280189755	91	392.9887549174
42	72.8398078083	92	347.8426873476	42	77.2692894973	92	404.7959456777
43	75.6608030035	93	357.5387545313	43	80.3941949585	93	416.9278341838
44	78.5523230786	94	367.4772233946	44	.83.6050353198	94	429.3933496238
45	81.5161311556	95	377.6641539794	45	86.9041737911	95	442.2016667385
46	84.5540344344	96	388-1057578289	46	90.2940385704	96	455.3622125738
47	87.6678852953	97	398-8084017747	47	93.7771246311	97	468.8846734196
48	90.8595824277	98	409.7786118190	48	97.3559955584	98	482.7790019386
49	94.1310719884		421.0230771145	49	101.0332854363	99	497.0554244919
50	97.4843487881		432.5486540424				511-7244486654

Amount of $\pounds 1$ per annum in n years at the following rates per cent.

Years	3 per cent.	Years	3 per cent.	Years	31 per cent,	Years	31 per cent.
1	1.	51	117-1807733090	1	1.	51	136.5828370186
2	203	52	121 6961965083	2	2035	52	142.3632363142
3	3.0000	53	126.3470824035	3	3.106225	5.3	148-3459495852
4	4.183627	54	131.1374948756	4	4.214942875	54	154.5380578206
	5.30913581	55	136.0716197219		5.3624658746	55	160.9468898443
5	6.4684098843	56	141-1537683135	5	65501521813	56	167.5800309888
7	7.6624621808	57	146.3883813629		7.7794075076	57	174.4453320734
8				7 8		58	181.2509186959
- 1	8.8923360463	58	151.7800328038		90516867704	_	
10	10.1591061276	59 60	157·3334337879 163·0534368016	10	10·3684958073 11·7313931606	59 60	188·9052008503 196·5168828800
11	12.8077956908	61	168.9450399056	11	13·1419919212 14·6019616385	61	204.3949737808
12	14.1920295615	1	175.0133911028	11		63	212.5487978630
13	15.6177904484	63	181.2637928359	13	16.1130302958	1	220.9880057882
14	17.0863241618	64	187.7017066209	14	17.6769863562	64	229.7225859908
15	18.5989138867	65	194.3327578196	15	19.2956808786	65	238.7628765004
16	20.1568813033	66	201.1627402241	16	20:9710297094	66	248-1195771780
17	21.7615877424	67	208-1976227708	17	22.7050157492	67	257.8037623791
18	23.4144353747	68	215.4435514539	18	24.4996913004	68	267.8268940623
19	25.1168684359	69	222.9068579975	19	26.3571804960	69	278-2008353545
20	26.8703744890	70	230.5940637374	20	28.2796818133	70	288-9378645919
21	28.6764857237	71	238-5118856496	21	30-2694706768	71	300-0506898525
22	30.5367802954	72	246.6672422190	22	32.3289021505	72	311.5524639973
23	32.4528837042	73	255.0672594856	23	34.4604137267	73	323.4568002372
24	34.4264702154	74	263.7192772702	24	36.6665282071	74	335.7777882455
			272.6308555883	25	38.9498566944	1	348.5300108340
25	36.4592643218	75		26		75	
26	38.5530422515	76	281.8097812559	11	41.3131016786	76	361.7285612132
27	40.7096335190		291.2640746936	27	43.7590602373	77	375.3890608856
28	42.9309225246		301.0019969344	28	46.2906273456		389.5276779855
29	45.518820503		311 0320568424	29	48.9107993027	79	404.1611467120
30	47.5754157063	80	321.3630185477	30	51.6226772782	80	419.3067868500
31	50.0026781775	81	332.0039091041	31	54.4294709829	18	434.9825243897
32	52.5027585229	82	342.9640263773	32	57.3345024673	82	451.2069127433
33	55.0778412785	83	354.2529471686	33	60.3412100536	83	467 9991 546893
34	577301765169		365.8805355836		63.4531524055	84	485.3791251034
35	60.4620818124		377.8569516512		66.6740127396	85	503.3673944820
3 6	63.2759442668		390.1926602007		70.0076031855	86	521 98525 32888
37	66.1742225948	_	402.8984400067		73.4578692969	87	541.2547371539
38	69.1594492726	1	415.9853932069		77.0288947223		561.1986529543
30		1 = -	429.4649550031	39	80.7249060376		581.8406058076
39 40	72 [.] 2 342327508 75 [.] 4012597333	1 .	443'3489036532		84.5502777488		603.502050500
		1		1		į	
41	78.6632975253		457.6493707628		88.5095374700		625.3172029562
42	82.0231964511	92	472.3788518857	42	92.6073712814		648.2033050596
43	85.4838923446		487.5502174423	11	96.8486292763		671.8904207367
44	89.0484091150		503.1767239655	44	101.5383313000	94	696.4065854624
45	92.7198613884	95	519.2720256845	45	105.7816728964	95	721.7808159536
46	96.5014572301	96	535.8501864550	46	110.4840314477	96	748 0431445119
47	100.3965009470		552.9256920487		115.3509725484	97	775 2246545698
48	104.4083959754	98	570.5134628101	48	120.3882565875	98	803.3575174797
	108.5406478546	-	588.6288666944	49	125.6018455681	99	832.4750305915

. Amount of £1 per annum in n years at the following rates per cent.

Year	4 per cent.	Years	4 per cent.	Year	44 per cent.	Years	4} per cent.
1	1.	51	159,7737670032	1	1.	51	187-5356645512
2	2.04	52	167-1647176833	2	2045	52	196 9747694560
3	3.1216	53	174.8513063906	3	3.137025	53	206.8386340816
4		54	182.8453586462		4.278191125	54	217.1463726152
	5.41632256	55	191-1591729921		5.4707097256	55	227.9179593829
5 6	6.6329754624	56	199.8055399118	5	6.7168916633	56	239.1742675552
7	7.8982944809		208.7977615082	7	80191517881	57	250.9371095951
8	9'2142262601	58	218-1496719686	7 8	9.3800136186	58	263:2292795269
9	10.5827953105	59	227.8756588473	9	10.8021142314	59	276.0745971056
1ó	120061071230	60	237.9906852012	1ó	12.2882093718	60	289.4979539754
11	13.4863514079	61	248-5103126092	11	13.8411787936	61	303.5253619043
12	150258054642	62	259.4507251136	12	15.4640318393	62	318.1840031900
13	16.6268376828	63	270.8287541182	13	17.1599132721	63	333.5022833335
14	18.2919111901	64	282 661 904 2829	14	189321093693	64	349.5098860835
15	200235876377	65	294 968 3804 542	15	20.7840542909	65	366-2378309573
16	21.8245311432	66	307.7671156724	16	22.7193367340	66	383.7185333503
17	23.6975123889	67	321 0778002993	17.	24.7417068870	67	401.9858673511
18	25 6454128845	68	334.9209123112	18	26.8550836970	68	421 0752313819
19	27.6712293998	69	349.3177488037	19	29.0635624633	69	441 0236167941
20	29.7780785858	70	364-2904587558	20	31.3714227742	70	461-8696795498
21	31 9692017189	71	379.8620771061	21	33.7831367990	71	483.6538151296
22	34*2479697876	72	3960565601903	22	36.3033779550	72	506:4182368104
23	36-6178885791	73	412.8988225979	23	38.9370299629	73	530.2070574669
24	390826041223	74	430.4147755018	24	41 6891963113	74	5550663750529
25	41 6459082872	75	448.6313665219	25	44.5652101453	75	581 044 361 9302
26	44.3117446187	76	467.5766211828	26	47.5706446018	76	608-1913582171
27	470842144034	77	487.2796860301	27	50.7113236089	77	636.5599693369
28	49.9675829795	78	507.7708734713	28	5379933331713	78	666.2051679570
29	52.9662862987	79	5290817084102	29	57.4230331640	79	697.1844005151
30	560849377507	80	551-2449767466	30	61 0070696564	80	729.5576985383
31	59:3283352607	81	574.2947758164	31	64.7523877909	81	763.3877949725
32	62.7014686711	82	598-2665668491	32	68.6662452415	82	798.7402457462
33	66 2095274180	83	623.1972295231	33	72.7562262774	83	835.6835568048
34	69.8579085147	84	649-1251187040	34	77°0302564599	84	874:2893168610
35	73.6522248553	85	6760901234521	35	81.4966180005	85	914.6323361199
36	77.5983138495	86	704.1337283902	36	86.1639658106	86	956.7907912453
37	81.7022464035	87	733-2990775258	37	91.0413442720		1000 [.] 8463768513
38	85 [.] 9703362596	88	763.6310406269	38	96.1382047643	88	1046:8844638096
39	90.4091497100	89	795.1762822519	39	101.4644239787	89 1	1094:9942646810
10	95 02551 56984	90	827.9833335420	10	1070303230577	90	1145-2690965917
41	99.8265363263	91	862-1026668837		112.8466875953		197-8061118883
	104.8195977794	92	897.5867735591	42	118-9247885371		252:7073869233
	1100123816905	93	934.4902445014		125.2764040213		3100792193348
	115.4128769582	94	972.8698542815		131.9138422022		3700327842049
	121 0293920365		012.7846484527		138-8499651013	95 1	432.6842594941
	126.8705677179		054.2960343908		146 09821 35309	96 I	498.1550511713
	132.9453904267		097.4678757665		153.6726331398		566.5720284740
	139.2632060437		142.3665907971		161.5879016311		638-0677697553
49	145.8337342855	99 1	189 0612544290		169.8593572045		712.7808193943
50	152.6670836569	FOO 1	237 6237046062	50	78.5030282787	100	790.8559562671

Amount of £1 per annum in n years at the following rates per cent.

Years	5 per cent.	Years	5 per cent.	Years	5½ per cent.	Years	5½ per cent.
1	1.	51	220.8153955009	1	1,	51	260.7594376502
2	205	52	232 8561652759	2	2.055	52	276.1012067210
3	3.122	53	245.4989735397	3	3.168022	53	292.2867730906
4	4.310125	54	258.7739222167	4	4.342266375	54	309:3625456106
5 6	5.52563125	55	272.7126183276	5	5.2810910226	55	327.3774856192
6	6.8019128125	55 56	287.3482492439	6	6.8880510320	56	346.3832473282
7	8.1420084531	57	302.7156617061	7	8.2668938388	57	366.4343259313
8	9.5491088758	58	318.8514447914	8	9.7215729999	58	387.5882138575
9	11 0265643196	59	335.7940170310	9	11.2562595149	59	409 905 5656 197
10	12.5778925355	60	353.5837178826	10	12.8753537882	60	433.4503717288
11	14.2067871623	61	372-2629037767	11	14.5834982466	61	458-2901421738
12	15'9171265204	62	391.8760489655	12	16.3855906502	62	484.4960999934
13	17.7129828465	63	412.4698514138	13	18.2867981359	63	512-1433854930
14	19.5986319888	64	434.0933439845	14	20'2925720334	64	541.3112716952
15	21.5785635882	65	456.7980111837	15	22.4086634952	65	572.0833916384
16	23.6574917676		480.6379117429	16	24.6411399875	66	604.5479781785
17	25.8403663560		505.6698073301	17	26.9964026868	67	638.7981169783
18	28.1323846738		531.9532976966	18	29.4812048345	68	674.9320134121
19	30.5390039075		559.5509625814	19	32.1026711004	69	713.0532741498
2ó	33.0659541029		588-5285107105	2ó	34.8683180110	7Ó	753.2712042280
21	35.7192518080	71	618-9549362460	21	37.7860755016	71	795.7011204606
22	38.5052143984	72	650.9026830583	22	40.8643096542	72	840.4646820859
23	41.4304751184	73	684.4478172112	23	44.1118466851	73	887.6902396006
24	44.5019988743	74	719.6702080718	24	47.5379982528	74	937.5132027787
25	47.7270988180	75	756.6537184754	25	51.1525881567	75	990.0764289315
26	51.1134537589		795.4864043992	26	54.9659805053	76	1045.5306325227
	54.6691264468		836.2607246191		58.9891094331		1104 0348173115
27 28		77		27 28		77 78	
	58.4025827692	78	879.0737608501	II.	63.2335104519	, •	1165.7567322636
29 30	62·3227119076 66·4388475030	79 80	924.0274488926	29 30	72.4354779708	79 80	1230.8733525381
	70.7607898782	81	1020:7902624041		77:4104202502	81	127210478122087
31				31	77·4194292592 82·6774978684	82	1372.0478132087
32	75.2988293721	1 -	1072.8297755243	32		-	1448.5104429352
33	80.0637708407		1127.4712643005	33	88.2247602512	83	1529.1785172966
34	85.0669593827		1184.8448275156	34	94.0771220650	84	1614.2833357480
35	90.3203073518	I	1245.0870688914	35	100.2513637786	85	1704.0689192141
36	95 8363227194	86	1308.3414223359	36	106.7651887864	86	1798.7927097709
37	101.6281388554		1374.7584934527	37	113.6372741696	87	1898.7263088083
38	107.7095457982		1444.4964181254	38	120.8873242490	88	2004.1262222022
39	114.0950230881	89	1517.7212390316		128.5361270827	89	2115.3848498613
40	120.7997742425	90	1594.6073009832	40	136.6056140722	90	2232.7310166037
41	127.8397629546		1675.3376660324		145.1189228462		2356.5312225169
42	135.2317511024	92	1760-1045493340	42	154.1004636027		2487.1404397553
43	142.9933386575	93	1849 1097768007	43	163.5759891009		2624.9331639419
44	151.1430055904		1942.5652656408	44	173.5726685014		2770.3044879587
45	159.7001558699		2040.6935289228	45	184-1191652690		2923.6712347964
46	168.6851636634		2143'7282053689		195.2457193588		3085.4731527102
47	178-1194218465		2251.9146156374		206.9842339235	97	3256.1741761092
	188.0253929389	98	2365.5103464193		219.3683667893	98	3436.2637557952
	198.4266625858		2484 7858637402		232.4336269627	99	3626-2582623640
	00012470057151		2610'0251569272	50	246.2174764457	100	2826-2024662044

TABLE III.

Amount of £1 per annum in n years at the following rates per cent.

Years	6 per cent.	Years	6 per cent,	Years	7 per cent.	Years	7 per cent.
1	1.	51	308-7560588582	1	1.	51	435.9859545351
2	206	52	328.2814223897	2	207	52	467.5049713526
3	3.1836	53	348-9783077331	3	3.2149	53	501-2303193473
4	4.374616	54	370 9170061970	4	4'439943	54	537.3164417016
	5 63709296	55	394.1720265689		5.75073901	55	575.9285926207
5 6	6.9753185376	56	418-8223481630	5	7:1532907407	56	617:2435941042
7	8.3938376499	57	444-9516890528	7	8.6540210925	57	661-4506456914
8	9.8974679088	58	472.6487903960	8	10.2598025690	58	708.7521908898
9	11.4913159834	59	502.0077178197	9	11.9779887489	59	759.3648442521
1ó	13.1807949424	60	533.1281808889	10	13.8164479613	60	813.5203833498
11	14.9716426389	61	566-1158717422	11	15-7835993186	61	871-4668101843
12	16.8699411973	62	601 0828240468	12	17.8884512709	62	933.4694868972
13	18.8821376691	63	638-1477934896	13	20.1406428598	63	999.8123509800
14	21.0150659292	64	677:4366610990	.14	22.5504878600	64	1070.7992155486
15	23.2759698850	65	719.0828607649	15	25.1290220103	65	1146.7551606370
16	25.6725280781	66	763.2278324108	16	27.8880535509	66	1228.0280218815
17	28.2128797628	67	8100215023555	17	30.8402172995	67	1314 9899834132
18	30.9056525485	68	859.6227924968	18	33.9990325104	68	1408.0392822522
19	33.7599917014	69	912.2001600466	19	37.3789647862	69	1507:6020320098
20	36.7855912035	70	967:9321696494	20	40.9954923212	70	1614.1341742505
21	39.9927266757	71	1027 0080998284	21	44.8651767837	71	1728-1235664480
22	43.3922902763	72	1089.6285858181	22	490057391585	72	18500922160994
23	46.9958276929	73	1156 0063009672	23	53.4361408996	73	1980.5986712264
24	50.8155773544	74	1226.3666790252	24	58.1766707626	74	2120.2405782122
25	54.8645119957	75	1300-9486797667	25	63.2490377160	75	2269.6574186871
26	59.1563827154	76	1380.0056005527	26	68.6764703561	76	2429.5334379952
27	63.7057656784	77	1463.8059365859	27	74.4832832810	77	2600 6007786548
28	68.2281116191	78	1552.6342927810	28	80.6976909107	78	2783.6428331606
29	73.6397983162	79	1646.7923503479	29	87.3465292745	79	2979.4978314819
30	79°0581862152	80	1746-5998913688	30	94.4607863237	80	3189:0626796856
31	84.8016773881	81	1852-3958848509	31	102 07 304 1 366 3	81	3413-2970672636
32	90.8897780314	82	1964.5396379420	32	110.5181242620	82	3653.2278619721
33	97.3431647133	83	2083.4120162185	33	118.9334250603	83	3909.9538123101
34	104.1837545961	84	2209.4167371916	34	128.2587648145	84	4184.6505791718
35	111.4347798719	85	2342.9817414231	35	138.2368783515	85	4478.5761197139
36	119.1208666642	86	2484.5606459085	36	148.9134598361	86	4793.0764480938
37	127.2681186640	87	2634.6342846630	37	160.3374020247	87	5129.5917994604
38	1 35 9042057839	88	2793.7123417428	38	172.5610201664	88	5489.6632254226
39	145 0584581309	89	2962.3350822473	39	185.6402915780	89	5874.9396512022
LO	154-7619656188	90	3141 0751871822	40	199.6351119885	90	6287 1854267864
41	165 0476835559	91	3330.5396984131	41	214.6095698277	91	6728.2884066614
	175.9505445692	92	3531-3720803179		230.6322397156	92	7200.2685951277
43	187.5075772434	93	3744.2544051369	43	247.7764964957	93	7705.2873967866
	199.7580318780	94	3969 9096694452	44	266.1208512504	94	8245.6575145617
	212.7435137907	95	4209.1042496119		285.7493108380	95	8823.8535405810
	226.5081246181	96	4462.6505045886	46	306.7517625966	96	9442-5232884217
	241 0986120952	97	4731.4095348639	47	329.2243859784	97	10104.4999186112
	256-5645288209	98	5016-2941069558	48	353.2700929969	98	10812 [.] 8149129140 11570 [.] 7119568180
						no l	
49 50	272 9584005502	99	5318·2717533731 5638·3680585755	49 50	378-9989995066		12381 6617937952

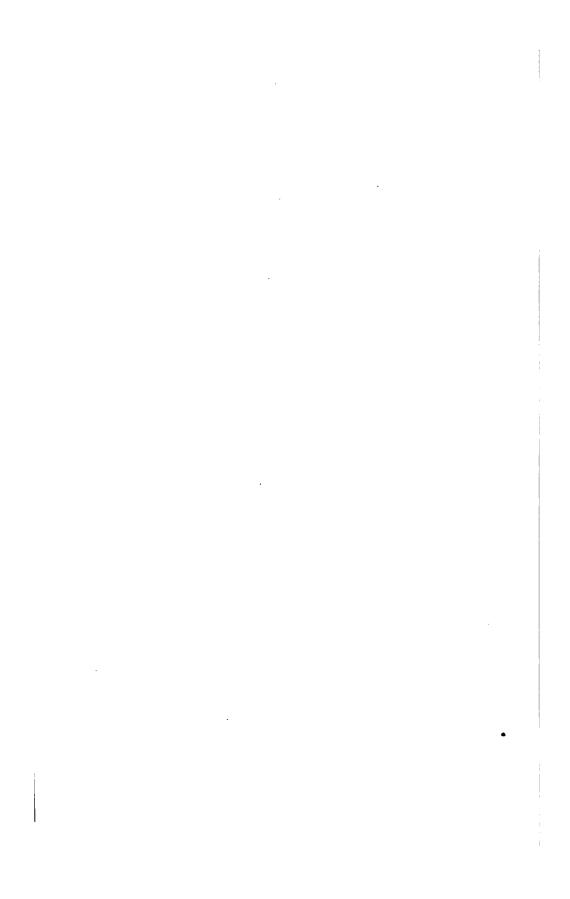
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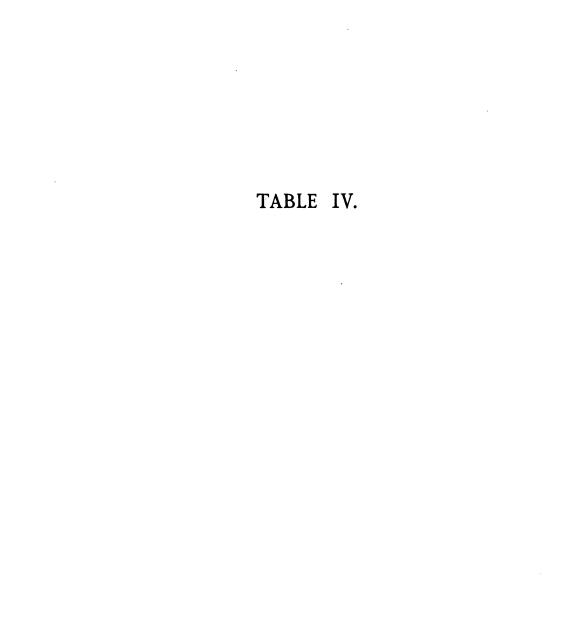
Years	8 per cent.	Years	8 per cent.	Years	9 per cent.	Years	9 per cent.
1	I.	51	620.671769	1	1.	51	889.441076
2	208	52	671.325510	2	2.09	52	970.490773
3	3.2464	53	726031551	3	3.2781	53	1058.834943
4	4.206113	54	785.114075	4	4.573129	54	1155.130088
5	5.866601	55	848 923201	5	5.984711	55	1260.091796
5	7:335929	56	917.837058	6	7.523335	56	1374.500057
7	8 922803	57	992.264022	7	9.200435	57	1499'205063
8	10.636628	58	1072 645144	8	11028474	58	1635.133518
9	12.487558	59	1159.456755	∥ 9	13021036	59	1783.295535
2ó	14.486562	60	1253.213296	10	15.192930	60	1944.792133
11	16-645487	61	1354:470360	11	17.560293	61	2120.823425
12	18:977126	62	1463:827988	12	20140720	62	2312.697533
13	21.495297	63	1581 934227	13	22.953385	63	2521.840331
14	24 ·214920	64	1709:488966	14	26019189	64	2749.805939
15	27.152114	65	1847 248083	15	29:360916	65	2998-288474
16	30:324283	66	1996 027929	16	337003399	66	3269 1 344 36
17	33.750226	67	2156.710164	17	36.973705	67	3564.356535
18	37.450244	68	2330 246977	18	41.301338	68	3886.148624
19	41.446263	69	2517 666735	19	46018458	69	4236'902000
20	45.761964	70	2720080074	20	51.160150	70	4619.223180
21	50.422921	71	2938 686480	21	56·764530	71	5035.953266
22	55:456755	72	3174781398	22	62·873338	72	5490189060
23	60.893296	73	3429.763910	23	69:531939	73	5985:306075
24	66764759	74	3705.145023	24	76.789813	74	6524 98 3622
25 L	73.105940	75	4002.556624	25	84.700896	75	7113'232148
26	79.954415	76	4323.761154	26	93'323977	76	7754'423041
27	87:350768	77	4670.662047	27	102.723135	77	8453.321115
28	95.338830	78	5045'315011	28	112968217	78	9215'120015
29	103 965936	79	5449 940211	29	124.135356	79 1	10045.480817
30	113.583511	80	5886-935428	30	136.307539	80	10950-574090
31	123:345868	81	6358-890263	31	149:575217	81	11937-125758
32	134.213537	82	6868.601484	32	164036987	82	13012.467077
33	145.950620	83	7419089602	33	179.800315	83	14184.289114
34	158.626670	84	8013-616770	34	196 982 344	84	15462.202134
35 l	172:316804	85	8655706112	35	215.710755	85	16854.800326
36	187·102148	86	93491162601	36	236.124723	86	18372.732355
37	203°070320	87	10098095609	37	258-375948	87	20027:278267
38	220.315945	88	10906 943258	38	282.629783	88	21830.733311
39	238 941221	89	11780:498719	39	309066463	89	23796.499309
ŧ0	259056519	90	12723 938616	40	337.882445	90	25939.184247
41	280.781040	91	13742.853705	41	369:291865	91	28274710829
42	304.243523	92	14843.282002	42	403.528133	92	30820.434804
43	329.583005	93	16031.744562	43	440.845665	93	33595.273936
44	356.949646	94	17315.284127	44	481.521775	94	36619.848591
45	386.505617	95	18701.506857	45	525.858734	95	39916.634964
46	418.426067	96	20198 627405	46	574.186021	96	43510'132110
47	452 9001 52	97	21815.517598	47	626.862762	97	47427 044000
48	490.132164	98	23561.759006	48	684.280411	98	51696.477960
49	530:342737	99	25447 699726	49	746.865648	99	56350.160977
BO	573.770156	100		50	815083556		61422-675465

TABLE III. 67

Amount of £1 per annum in n years at the following rates per cent.

Years	10 per cent.	Years	10 per cent.	Years	10 per cent.	Years	10 per cent.
1	1.	26	109.181765	51	1281-299382	76	13980-849085
2	2.10	27	121 099942	52	1410.429320	77	15379 933994
3	3.31	28	134.209936	53	1552.472252	78	169187927393
4	4.641	29	148.630930	54	1708-719477	79	18611 820133
5	6.1021	30	164.494023	55	1880.591425	80	20474 002146
6	7.71561	1 1		56	2069.650567	1 1	
7 8	9.487171	31	181343425	57	2277.615624	81	22522.402360
8	11.435888	32	201 · 1 37767	58	2506-377186	82	24775 642596
9	13.579477	33	222.251544	59	2758014905	83	27254 206856
10	15.937425	34	245·476699	60	3034.816395	84	29980-627542
1		35	271 024368			85	32979 690296
11	18.531167	36	299:126805	61	3339:298035	86	36278 659326
12	21.384284	37	330·039486	62	3674-227838	87	39907.525258
13	24.522712	38	364°043434	63	4042.650622	88	43899:277784
14	27:974983	39	401.447778	64	4447.915685	89	48290.205562
15	31.772482	40	442.592556	65	4893.707253	90	53120-226118
16	35:949730	1 1		66	5384.077978	1	
17	40.244703	41	487.851811	67	5923:485776	91	58433*248730
18	45.599173	42	537.636992	68	6516.834354	92	64277.573603
19	51.159090	43	592.400692	69	7169.517789	93	70706:330964
20	57 ^{.2} 74999	44	652:640761	70	7887:469568	94	77777:964060
- 1	_	45	718-904837	1 1		95	85556.760466
21	64°002499	46	791.795321	71	8677:216525	96	94113.436513
22	71.402749	47	871 974853	72	9545.938177	97	103525.780164
23	79.543024	48	960-172338	73	10501.231995	98	113879.358180
24	88.497327	49	1057.189572	74	11552.685195	99	125268-293998
25	98.347059	50	1163 908529	75	12708.953714	100	137796-123398





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Present value of £1 due n years hence at the following rates per cent.

Years	3 per cent.	Years	8 per cent.	Years	8) per cent.	Years	Si per cent.
1	97087379	51	-22146318	1	96618357	51	17299843
2	94259591	52	.21501280	2	93351070	52	16714824
3	91514166	53	·20875029	3	90194270	53	16149589
4	·88848705	54	20267019	1 4	.87144223	54	15603467
5	·86260878	55	19676717	5	84197317	55	15075814
5	83748426	56	19103609	5	81 350064	56	14566004
7	12100118	57	18547193		78599096	57	14073433
7 8	*78940923	58	18006984	7 8	75941156	58	13597520
9	76641673	59	17482508	9	73373097	. 59	13137701
10	74409391	60	16973309	10	70891881	60	12693431
11	72242126	61	·16478941	111	·68494571	61	12264184
12	•701 37988	62	15998972	12	66178330	62	11849453
13	68095134	63	15532982	13	63940415	63	11448747
14	66111781	64	15080565	14	61778179	64	11061591
15	64186195	65	14641325	15	·59689062	65	10687528
16	62316694	66	14214879	16	.57670591	66	10326114
17	60501645	67	1 3800853	17	•55720378	67	09976922
18	.58739461	68	13398887	18	.53836114	68	09639538
19	157028603	69	13008628	. 19	•52015569	69	09313563
20	.55367575	70	12629736	20	.50256588	70	08998612
21	·53754928	71	12261880	21	48557090	71	08694311
22	.52189250	72	11904737	22	46915063	72	08400300
23	.50669175	73	11557998	23	45328563	73	08116232
24	49193374	74	11221357	24	43795713	74	07841770
25	47760556	75	10894521	25	42314699	75	07576590
26	46369473	76	10577205	26	40883767	76	07320376
27	45018906	77	10269131	27	39501224	77	07072827
28	43707675	78	09970030	28	38165434	78	06833650
	·42434636	79	09679641	29	•36874815	79	06602560
29 30	41198676	80	09397710	30	.35627841	80	06379285
31	.39998714	81	09123990	31	*34423035	81	0616356 r
32	.38833703	82	08858243	32	33258971	82	05955131
33	.37702625	83	08600236	33	32134271	83	·05753750
34	36604490	84	08349743	34	31047605	84	05559178
1	35538340	85	08106547	35	29997686	85	05371187
35 36		86	07870434	36	28983272	86	05189553
	*34503243	87	07641198		.58003191	87	*05014060
37 38	133498294	88	07418639	37 38	27056194	88	04844503
	.32522615					89	
39 10	·31575355 ·30655684	89	07202562 069927 7 9	39 40	·26141250 ·25257247	90	*04680679 *04522395
41	29762800	91	06789105	41	*24403137	91	•04369464
42	28895922	92	06591364	42	23577910	92	04309404
	·28054294	93	06399383	43	*22780590 ·	93	04221704
43	·27237178	1 1	06212993	44	22010231	93	03941006
14	26443862	94	06032032	н 1	21265924	1 * '	
15		95	05856342	45	21205924	95	63807735
16	·25673652	96		и , і			03678971
17	24925877	97	05685769	47	19851968	97	03554562
8	*24199880	98	05520164	48	19180645	98	03434358
19	23495029	99	05359383	49	18532024	99	03318221
0	.22810708	100	05203284	50	17905337	100	·03206011

Present value of £1 due n years hence at the following rates per cent.

Years	4 per cent.	Years	4 per cent.	Years	4½ per cent.	Years	44 per cent.
ı	96153846	51	13530059	ı	•95693780	51	10594225
2	92455621	52	13009672	2	91572995	52	10138014
3	· 88899636	53	12509300	3	·8762966o	53	09701449
4	185480419	54	12028173	4	83856134	54	09283683
71	82192711	55	11565551		80245105	55	08883907
5		36	11120722	5	.76789574	36	08501347
	79031453					1 20	08135260
7	75991781	57	10693002	7 8	.73482846	57	
8	•73069020	58	10281733		.70318513	58	07784938
9	.70258674	59	09886282	9	67290443	59	07449701
10	67556417	60	109506040	10	64392768	60	128901
11	64958093	61	*09140423	11	61619874	61	06821915
12	62459705	62	-08 788868	12	·58966386	62	06528148
13	•60057409	63	·08450835	13	·56427164	63	0 6247032
14.	•57747508	64	·08125803	14	•53997286	64	0 5978021
15	·55526450	65	107813272	15	·51672044	65	5720594
16	•53390818	66	107512760	16	·4 9446932	66	°54742§3
17	.51337325	67	07223809	17	47317639	67	05238519
18	49362812	68	06945970	18	45280037	68	05012937
19	47464242	69	06678818	19	43330179	69	04797069
20	45638695	70	06421940	20	41464286	70	04590497
21	•43883360	71	06174942	21	•39678743	71	04392820
22	42195539	72	° 5937445	22	37970089	72	04203655
23	40572633	73	05709081	23	.36335013	73	04022637
24	39012147	74	·05489501	24	34770347	74	03849413
25	37511680	75	·05278367	25	•33273060	75	0 3683649
26	36068923	76	05075353	26	31840248	76	03525023
	134681657	1 ' 1	04880147	27	*30469137		03373228
27 28		77 78	04692449	28		77 78	
[33347747			11 1	29157069		03227969
29 30	•32065141 •30831867	79 80	°04511970 °04338433	29 30	·27901502 ·26700001	79 80	03088966 02955947
	: 2964602 6	81	*04171770		107770041	81	02828658
31		82	04171570	31	*25550241	82	
32	.28505794		04011125	32	·24449991		•02706850
33	27409417	83	·03856851	33	*23397121	83	02590287
34	•26355209	84	03708510	34	•22389589	84	02478744
35	25341547	85	~ 356 <u>5</u> 87 <u>5</u>	35	*21425444	85	02372003
36	•24366872	86	·03428726	36	~ 20502817	86	102269860
37	•23429685	87	·032968 52	37	19619921	87	*02172115
38	22528543	88	03170050	38	18775044	88	*02078579
39	·21662061	89	• 03048125	39	17966549	89	101989070
40	120828904	90	• 02930890	40	17192870	90	01903417
41	20027792	91	02818163	41	16452507	91	01821451
42	19257493	92	02709772	42	15744026	92	*01743016
43	18516820	93	02605550	43	15066054	93	1 01667958
44	·17804635	94	02505337	44	14417276	94	·01596132
45	17119841	95	02408978	45	13796437	95	01527399
46	·16461386	96	02316325	46	13202332	96	01461626
47	15828256	97	02227235	47	·12633810	97	o1398685
48	15219476	98	02141572	48	12089771	98	·01338454
	14634112	99	02059204	49	11569158	99	01330454
49							

TABLE IV. Present value of $\pounds 1$ due n years hence at the following rates per cent.

Years	5 per cent.	Years	5 per cent.	Years	6 per cen t.	Years	6 per cent.
1	95238095	51	08305117	1	94339623	51	05121544
2	•90702948	52	07909635	2	·88999644	52	~ 0483164 5
3	·8638376 0	53	·0753 2 986	3	·83961928	53	~4558156
4	·82270247	54	07174272	4	. 79209466	54	04300147
5	•78352616	55	06832640	5 6	74725817	55	04056742
	·7462154 6	55	06507276		·70496054	56	03827115
7 8	.71068133	57	06197406	7 8	66505711	57	03610486
8	67683936	58	05902291	8	62741237	58	03406119
9	64460892	59	05621230	9	59189846	59	03213320
10	61391325	60	05353552	10	.55839478	60	03031434
11	•58467929	61	05098621	11	52678753	61	02859843
12	·556837 42	62	·04855830	12	·49696936	62	02697965
13	.53032135	63	0 4624600	13	46383902	63	·02545250
14	•50506795	64	~ 04404381	-14	·44230096	64	6 2401179
15	· 48101710	65	·04194648	15	41726506	65	702265264
16	.45811152	66	03994903	16	: 39364628	66	102137041
17	·43629669	67	·03804670	17	·37 I 3644 2	67	102016077
18	41552065	68	103623495	18	35034379	68	01901959
19	•39573396	69	03450948	19	.33021301	69	01794301
20	.37688948	70	03286617	20	.31180473	70	01692737
21	•35894236	71	03130111	21	*29415540	71	·01596921
22	.34184987	72	02981058	22	27750510	72	101506530
23	.32557131	73	02839103	23	·2617972 6	73	01421254
24	•31006791	74	·02703908	24	·2469785 5	74	·01340806
25	·2953 0277	75	·02575150	25	·2329986 3	75	01264911
26	. 28124073	76	~2452524	26	·2198100 3	76	701193313
27	•26784832	77	·02335737	27	•2 073679 5	77	125767
28	·25509364	78	02224512	28	19563014	77 78	01062044
29	•24294632	79	·02118582	29	·1845567 4	79	·01001928
30	*23137745	80	·02017698	30	17411013	80	00945215
31	•22035947	81	01921617	31	·16425484	81	:00891713
32	·2098661 <i>7</i>	82	11108810	32	15495740	82	·0084123 8
33	19987254	83	·01742963	∥ 33 ∤	14618622	83	00793621
34	190354 80	84	• 01659965	34	13791153	84	00748699
35	18129029	85	• 01580919	35	13010522	85	00706320
36	17265741	86	1505637	36	12274077	86	00666340
37	•16443563	87	° 01433940	37	11579318	87	20062862
38	·15660536	88	·01365657	38	10923885	88	00593040
39	14914797	89	·01 300626	39	10305552	89	00559472
40	·14204568	90	·01238691	40	09722219	90	00527803
41	13528160	91	10 1179706	41	09171905	91	00497928
42	•12883962	92	°01123530	42	·08652740	92	00469743
43	12270440	93	·01070028.	43	.08162963	93	*00443154
44	11686133	94	01019074	44	07700908	94	00418070
45	11129651	95	*00970547	45	07265007	95	00394405
46	10599668	96	. 00924331	46	·06853781	96	90372081
47	10094921	97	00880315	47	·06465831	97	00351019
48	109614211	98	00838395	48	06099840	98	°∞331150
49	·09156391	99	•00798471	49	·05754566	99	00312406
50	.08720373	100	00760449	50	05428836	100	00294723

Present value of £1 due n years hence at the following rates per cent.

Years	7 per cent.	Y are	7 per cent.	Years	8 per cent.	Years	8 per cent.
1	93457944	51	03172688	1	92592593 *	51	01974188
2	87343873	52	02965129	2	·85733882 ·	52	01827952
3	81629788	53	02771148	3	79383224.	53	01692548
3 4 5 6	.76289521	54	02589858	4	73502985	54	01567174
<u> </u>	71298618	55	02420428	1 2	68058320	55	01451087
8	66634222	56	02262083	5	63016963	56	01343599
7	62274974	57	02114096	7	·58349040·	57	01244073
7 8	•58200910	38	01975791	7 8	54026888	58	01151920
9	•	59	01846533	9	150024897	59	01066592
10	*54393374 *50834929	60	01725732	10	46319349	60	0000392
11	.47509280	61	01612834	1,,	· 42 888286	61	00914431
12	44401196	62	01507321	12	.39711376	62	00846696
13	41496445	63	01408711	13	36769792	63	00783977
14	38781724	64	01316553	14	34046104	64	00725905
	36244602	65	01230423	15		65	00672134
15		66		16	31524171	66	
- 1	•33873460	67	01149928	11 1	29189047		00522346
17	.31657439	68	01074699	17	•27026895	67	00576247
	•29586392	69	01004392		25024903		00533562
19	•27650833	70	00938684	19	.23171206	69	00494039
20	·25841900	76	00877275	20	*21454821	70	00457443
21	*24151309	71	00819883	21	19865575	71	00423558
22	22571317	72	00766246	22	18394051	72	00392184
23	21034688	73	00716117	23	17031528	73	°00363133
24	19714662	74	00669269	24	·15769934	74	00336234
25	18424918	75	00625485	25	14601790	75	00311328
26	17219549	76	თა584565	26	.13520176	76	00288267
27	16093037	77	·00546323	27	·12518682	77	00266914
28	15040221	78	00510582	28	11591372	78	00247142
29	14056282	79	·00477179	29	·1073275 2	79	00228835
30	13136712	80	00445962	30	~9937733	80	00211885
31	12277301	81	·00416787	31	09201605	18	.00 1961 90
32	11474113	82	~ 00389520	32	08520005	82	00181657
33	10723470	83	°00364038	33	0 7888893	83	20168201
34	10021934	84	00340222	34	07304531	84	00155742
35	. 09366294	85	00317965	35	10 6763454	85	00144205
36	ა 8753546	86	00297163	36	0 6262458	86	00133523
37	·08180884	87	·00277723	37	~5798572	87	00123633
38	0 7645686	88	00259554	38	05369048	88	00114475
39	·07145501	89	.00242574	39	04971341	89	200105995
40	·06678038	90	00226704	10	°04603093	90	00098144
41	·06241157	91	00211873	41	04262123	91	100090874
42	05832857	92	.00198013	42	03946411	92	00084142
43	05451268	93	∞ 185058	43	03654084	93	00077910
44	05094643	94	00172952	44	'03383411	94	90072138
	04761349	95	·00161637	45	03132788	95	00066795
45 46	04449859	96	00151063	46	102900730	96	90061847
47	04158747	97	·00141180	47	1 02685861	97	00057265
48	·03886679	98	·00131944	48	·0248690 8	98	00053024
49	03632410	99	90123312	49	02302693	99	00049096
SÓ I	03394776	100	100115245	50	02132123	100	00045459

Present value of £1 due n years hence at the following rates per cent.

Years	9 per cent.	Years	9 per cent.	Years	10 per cent.	Years	10 per cent.
	91743119	51	°01233811		10000000	51	00774414
2	.84167999	52	01131937	2	·82644628	52	00704013
3	77218348	53	01038474	3	75131480	53	00640011
	70842521		00952728	4	68301346	54	00581829
4	64993139	54	00874063		62092132	55	00528935
5	•59626733	56	00801802	5 6	.26447393	33	00480850
2			000735681			57	00437136
7 8	•54703424 •50186628	57		7 8	.51315812	38	
		58	00674937		.46650738		00397397
9	•46042778	59	00619208	10	42409762	59	00361270
10	·42241081	60	00568081		·38554329		00328427
11	•38753285	61	· 0 0521175	11	· 35049390	61	0 0298570
12	35553473	62	*************	12	·31863082	62	00271427
13	•32617865	63	5 00438663	13	·28966438	63	00246752
14	29924647	64	00402443	14	·26333125	64	00224320
15	*27453804	65	00369214	15	23939205	65	00203927
16	25186976	66	00338728	16	21762914	66	·00185388
17	23107318	67	00310760	17	19784467	67	·00168535
18	21199374	68	90285101	18	17985879	68	00153214
19	19448967	69	00261560	19	16350799	69	001 39285
2ó	17843089	7ó	00239963	20	14864363	70	100126623
21	16369806	71	00220150	21	*13513057	71	00115112
22	15018171	72	00201972	22	12284597	72	100104647
23	13778139	73	00185296	23	11167816	73	00095134
24	12640494	74	00169996	24	10152560	74	00086485
25	11596784	75	00155960	25	09229600	75	00078623
26	10639251	76	00143082	26	08390545	76	00071475
27	09760781		00131268	27	07627768	77	00064978
28	08954845	77 78	00120430	28	06934335	78	00059070
29	08215454	79	00110486	29	06303941	79	00053700
3ó	07537114	8ó	00101363	30	05730855	80	00048819
31	10 6914783	81	00092994	31	·05209868	81	18244381
32	~ 6343838	82	00085315	32	04 736244	82	00040346
33	05820035	83	00078271	33	04305676	83	100036678
34	05339481	84	00071808	34	03914251	84	100033344
35	048986 0 7	85	00065879	35	03558410	85	00030313
36	04494135	86	00060440	36	03234918	86	00027557
37	04123059	87	00055449	37	02940835	87	00025052
38	03782623	88	00050871	38	02673486	88	00022774
39	03470296	89	00046670	39	02430442	89	00020704
4ó	03183758	90	00042817	20	02209493	90	00018822
41	02920879	91	00039282	41	•02008630	91	11171000
42	02679706	92	100036038	42	v 1826027	92	00015555
43	02458446	93	00033063	43	01660025	93	00014141
44	02255455	94	00030333	44	01509113	94	00012855
45	02069224	95	00027828	45	01371921	95	100011687
46	*01898371	96	00025530	46	01247201	96	00010624
	01741625		00023422	47	01133819	97	.00000628
47	01597821	97	00023422	48	01030745	98	100008780
48		98	00021488		00937041	99	00007982
49	**************************************	99	90019714 90018086	49 50	00937041	100	00007257
50	~1344854	100	-20010000	li an i	00031033	(200)	3000,257

Present value of £1 due n years hence at the following rates per cent.

Years	11 per cent.	12 per cent.	13 per cent.	14 per cent,	15 per cent.	Years
1	90090090	*89285714	*88495575	.87719211	·86956530	1
2	81162243	79719388	78314668	76946753	75614367	2,
3	73119138	71178025	69305016	67497152	65751623	3
4	65873097	63551808	61331873	159208028	57175325	4
	159345133	.56742686	*54275994	51936866	49717674	1 7
5		50663112				5
	•53464084		48031853	45558655	43232760	
7 8	48165841	45234922	'42506064	39963732	*37593704	7 8
	43392650	40388323	.37615986	.35055905	132690177	
_ 9	39092477	.36061003	.33288483	30750794	*28426241	9
10	.35218448	'32197324	*29458835	*26974381	'24718571	10
11	.31728331	28747610	26069765	-23661738	21494322	11
12	•28584082	*25667509	123070589	20755910	18690715	12
13	25751426	*22917419	20416450	18206939	16252796	13
14	23199482	20461981	18067655	15970999	14132866	14
15	20900435	18269626	15989075	14009648	12289449	15
16	18829220	16312166	14149624	12289165	10686477	16
17	16963262	14564434	12521791	10779969	09292589	17
18 l	15282218	13003959	.11081231	09456113	08080512	18
19	13767764	11610678	.09806399	08294836	67026532	19
80	12403391	10366677	08678229	07276172	06110028	20_
21	11174226	109255961	07679849	06382607	05313068	21
22		108253901				22
	10066870 08264251		06796327	05598778	04620059	
23	09069252	07378796	.06014448	04911209	04017443	23
24	08170498	06588210	*05322521	04308078	03493428	24
25	. 07360809	·05882331	.04710195	03779016	03037764	25
26	°06631359	·05252081	04168314	02641534	26	
27	° 05974197	•04689358	•03688774	02907830	02296986	27
28	05382160	04186927	03264402	02550728	01997379	28
29	04848793	93738327	102888851	02237481	01736851	29
3ó	04368282	03337792	02556505	01962702	01510305	3ó
31	103 935389	02980172	02262394	01721669	01313309	31
32	3545395	02660868	02002119	01510236	01142008	32
33	03194050	02375775	01771786	01324768	00003344	33
34	02877522	02121227	01567953	01162077	00863522	34
	02592363	01893953	01387569	01019366	00750889	
35 36	02335462	01691029	01307309	01019300	00750009	35
			01086670			
37	02104020	01509848		00784369	00567798	37
38	·01895513	01348078	00961655	00688043	.00493722	38
39	101707670 101538441	01203641 01074680	00851022	00603547	00429323	39
	0.55044.	0.07,4000		00,5,45,	003/3324	
41	°01385983	00959536	***************************************	00464410	*00324630	41
42	01248633		100589801	***************************************	*00282287	42
43	O1124895	00764936	00521948	.00357348	.00245467	43
44	0 1013419	00682978	100461901	*00313463	00213449	44
45	°00912990	00609802	00408762	00274968	'00185608	45
46	·00822513	·00544466	· 0 0361736	00241200	.00161398	46
47	00741003	00486131	00320120	00211579	*00140346	47
48	00667670	*00434045	.00283292	00185595	00122040	48
49	00601415	00387540	*00250701	00162803	00106122	49
50	00541815	00346018	.00221859	00142810	00092280	50

TABLE IV.

Present value of £1 due n years hence at the following rates per cent.

Years	16 per cent.	17 per cent.	18 per cent.	19 per cent.	20 per cent.	Years
ī	·8620 6 897	*85470085	*84745763	-84033613	-83333333	-
2	°74316290	73051355	71818443	70616482	6944444	2
3	64065767	62437056	60863087	.59341581	57870370	3
4	55229110	153365005	51578888	49866875	48225309	4
7	47611302	45611115	43710922	41904937	40187757	7
5		38983859				5
	41044225		37043154	35214233	133489798	
7 8	*35382952	•33319538	*31392503	29591792	27908165	7 8
0	*30502546	•28478237	*26603816	124867052	23256804	
9	•2 629 5298	*24340374	122545607	•20896683	19380670	9
10	•2 2668360	20803738	19106447	17560238	16150558	10
11	19541690	17780973	16191904	14756502	13458799	11
12	·1684628 4	15197413	13721953	12400422	11215665	12
13	14522659	12989242	11628773	10420523	09346388	13
14	12519534	91610111.	09854893	08756742	·07788657	14
15	10792701	09488817	08351604	07358606	06490547	15
16	09304053	00101180	07077628	06183703	05408789	16
17	08020735	06931709	05997992	05196389	04507324	17
18	06914427	05924538	05083044	04366713	03756104	18
19	05960713	.05063708	04307664	03669507	93130086	19
20	05138546	*04327955	03650563	03083619	02608405	20
21	201120781	03699107	03093698	02591277	02173671	21
22			02621778	02177544	01811393	22
23	°03818776		020217/8	01829869	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1
- 1	*03292049	02702248			01509494	23
24	02837973		01882920	01537705	01257912	24
25	.02446528	01974029	·01595695	01292189	01048260	25
26	02109076	01687204	01352284	01085873	co873550	26
27	.01818169	01442055	01146003	00912498	00727958	27
28	·01567387	·01232525	100971189	90766805	100606632	28
29	·01351196	1053440	00823042	*00644374	1 00505526	29
30	·01164824	100900376	100697493	00541491	100421272	30
31	·01004159	.00769553	00591096	00455034	90351060	31
32	·00865654	.00657737	100500929	00382382	00292550	32
33	00746253	00562169	100424516	00321329	00243792	33
34	.00643322	00480486	00359759	100270025	00203160	34
35	.00554588	00410672	00304880	00226011	00169300	35
36	00478093	00351002	00258373	90190682	00141083	36
37	00412149	100300001	00218960	00160237	00117569	37
38	·00355301	00256411	00185560	00134653	00097974	38
39	00306294	00299155	00157254	00113154	00081645	39
40	00264047	00187312	00133266	00095087	000068038	40
41	00227626	90000160096	ł	100079905	100056698	41
42	0022/020	00136834	00112937	1000/9905	00047248	
	00169163	00130834 00116952	**************************************			42
43				00056426	00039374	43
44	00145831	00099959	00068737	00047417	00032811	44
45	00125716	00085435	00058252	00039846	00027343	45
46	00108376	00073021	00049366	00033484	100022786	46
47	00093427	00062411	00043663	00028138	88681000	47
48	00080541	·00053343	100035454	00023645	00015823.	48
49	100069432	100045592	100030046	00019870	900013186	49
B0	00059855	5 0038968	00025462	90016698	-00010988	50

Present value of £1 due n years hence at the following rates per cent.

Years	21 per cent.	22 per cent.	23 per cent.	24 per cent.	25 per cent.	Years
	·82644628	81967213	.81300813	-80645161	.800000000	1
2	68301346	67186240	66098222	65036420	64000000	2
3	.56447393	-55070689	.53738392	52448726	•51199869	3
4	46650738	45139909	43689749	42297360	*40050037	4
	.38554329	36999925	35520122	'34110774	32768000	5
5	31863082	30327808	28878148	27508689	26214400	
	26333125	24858859	23478169	*22184426	20971520	7 8
7 8	21762914	20376114	19087942	17890666	16777216	8
9	17985879	16701733	15518652	14427957	13421773	9
,10	·14864363	13689945	12616790	11635449	10737418	10
11	12284597	11221266	10257553	09383427	108589935	11
12	·10152560	09197759	08339474	07567280	06871948	12
13	08390545	07539147	06780060	06102645	05497558	13
14	06934335	06179629	05512244	04921488	04398047	14
15	05730855	05065269	04481499	03968942	03518437	15
16	04736244	04151860	03643495	03200759	02814750	16
17	03914251	03403164	02962191	02581258	102251800	17
18	03234918	02789479	02408286	02081659	01801440	18
19	02673486	02286458	01957956	01678758	01441152	19
20	02209493	01874146	01591834	01353837	01152922	20
21	101826027	01536185	01294174	01091804	100922337	21
22	101509113	01259168	01052174	00880487	00737870	22
23	01247201	01032105	00855426	00710070	100590296	23
24	01030745	00845988	00695468	00572637	00472237	24
25	00851855	00693433	00565421	00461804	00377789	25
26	00704013	00568387	00459692	00372423	00302231	26
27	00581829	00465891	00373733	00300341	00241785	27
28	00480850	00381878	00303848	00242210	00193428	28
29	90397397	00313015	00247031	00195331	00154743	29
30	00328427	00256570	90200838	00157525	00123794	30
31	*00271427	200210303	00163283	00127036	100099035	31
32	100224260	00172379	100132751	00102449	00079228	32
33	· 00185388	00141295	00107927	100082620	100063383	33-
34	·00153214	100115815	.00087746	100066629	100050706	34
35	00126228	100094931	900071338	***************************************	00040565	35
36	·00104647	00077812	00057998	00043333	00032452	36
37	·00086485	00063780	00047153	100034946	00025961	37
38	00071475	200052279	00038336	00028182	00020769	38
39	100059070	00042852	00031167	00022728	00016615	39
ĐÓ.	00048819	700035124	00025339	00018329	100013292	40
41	00040346	00028793	00020601	100014781	90010634	41
42	.00033344	00023599	00016749	100011920	00008507	42
43	00027557	00019345	90013617	100009613	00006806	43
44	00022774	00015855	00011071	00007753	00005445	44
45	00018822	00012996	100000001	100006252	90004356	45
46	.0001222	00010652	00007318	00005042	100003484	46
47	.00012855	00008731	00005949	100004066	100002788	47
48	00010624	00007157	00004837	00003279	'00002230	48
49	00008780	00005866	00003932	00002644	100001784	49
50	00007257	00004808	20003197	700002133	00001427	50

TABLE V.

FOR THE

REDEMPTION OF CAPITAL.

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81 TABLE V. Redemption Fund necessary to produce £1 in n years at the following rates per cent.

				11				•
Years	1½ per cent.	Years	1½ per cent.	Years	2 per cent.	Years	2 per cent.	
1	1.0000000000	51	0131946887	1	1.0000000000	51	0114585615	
2	·49627791 56	52	0128328700	2	4950495049	52	0111090856	
3	13283829602	53	0124853664	3	3267546725	53	0107739189	
4	•2444447860	54	0121513812	4	2426237526	54	0104522618	
<u> </u>	1940893230	55	0118301756		1921583941	55	0101433732	
5	1605252147	56	011 \$202954	5 6	1585258123	36	0098465645	7.
7	1365561645	57	0112234068		1345119561		0095611957	•
7 8	1185840245	38	0112234000	7 8	1345119501	57	0092866706	
			0109300110		1165097991			
9	1046098234	59	0106601241	9	1025154374	59	0090224335	
LO	~ 934341779	60	0103934274	10	0913265279	60	20087679658	
11	0842938442	61	1 0101360387	11	0821779428	61	008 <u>1744370</u>	521
12	10 766799929	62	0098875059	12	0745595966	62	0082804300	
13	0702403574	63	0096474061	13	0681183527	63	0080584849	
14	0647233186	64	0094153423	14	0626019702	64	0078385471	
15	0599443556	65	0091909423	15	0578254723	65	0076262436	
15 16	0557650778	66	0089738563	16	0536501259	66	0074212231	
17	0520796569	67	0087637552	17	0499698408	67	0072231553	
18	0488057818	68	0085603297	18	0467021021	68	0070317294	
19	0458784701	69	0083632878	19	0437817663	69	0068466526	
3ó	0432457359 .	7ó	0081723548	2ó	0411567181	70	0066676485	
	0408654950	71	0079872709	21	0387847689	1	0064944567	
21 22		1 ' 1		22		71		
	0387033152	72	0078077911	14	0366314005	72	0063268307	
23	0367307520	73	0076336836	23	0346680976	73	0061645379	
24	0349241020	74	0074647293	24	0328710973	74	0060073582	
25	0332634539	75	10073007206	25	0312204384	75	°0058550830	
26	0317319599	76	0071414609	26	6 296992308	76	0057075147	
27	0303152680	77	0069867637	27	0282930862	77	0055644661	
28	10290010765	78	0068364523	28	10269896716	78	0054257595	
29	0277787802	179	0066903586	29	0257783552	79	0052912260	
10	0266391883	80	0065483231	30	0246499223	80	0051607055	
31	0255742954	81	0064101941	31	0235963472	81	0050340453	
32	0245770970	82	0062758275	32	0226106073	82	0049111006	
33	0236414375	83	0061450857	33	0216865311	83	0047917333	
34	0227618855	84	0060178380	34	0208186728	84	0046758118	
35	0219336303	85	0058939597	35	0200022092	85	0045632109	
36	0211523955	86	0057733319	36	0192328526	86	0044538110	
37	0204143673	87	0056558413	37	0185067789	87	0043474981	
8	0197161329	88	0055413794	38	0178205663	88	0042441633	
	0190546298	89	0054298429	39	0171711439	89	0041437027	
39 • 0	0190340290	90	0053211330	40	0165557478	90	0040460169	
.								
11	**************************************	91	0052151552	41	0159718836	91	0039510108	
2	172642571	92	0051118190	42	0154172945	92	0038585936	
3	O 167246488	93	0050110379	43	0148899334	93	0037686782	
4	~ 162103801	94	0049127291	44	0143879391	94	0036811814	
5	~ 157197604	95	·0048168132	45	10139096161	95	0035960233	
6	O152512458	-96	0047232141	46	©134534159	96	0035131275	
7	~148034238	97	0046318590	47	0130172220	97	0034324205	939
8	0143749996	98	0045426778	48	·0126018355	98	0033538321	
19	139647841	99	0044556033	49	0122039639	99	0032772947	

Redemption Fund necessary to produce £1 in n years at the following rates per cent.

I I 0000000000 51 0099086955 1 I 0000000000 51 0095744635 2 4926108374 52 0095744635 2 4926108374 52 0095744635 2 4926108374 52 0095744635 2 4926108374 52 0095744635 0095744633 0095744633 0095744633 0095744633 0095744633 0095744633 0095744633 0095744633 0095744633 0095744633 0095744633 0095744633	3 per cent. 085338232 0852171837 079147059 076255841 073490710 070844726 0668311432 065884819 063559281 061329587 0059190847 055168216 053276021 051458128
2 '4938271604 52 '0095744635 2 '4926108374 52 '0 3 '3251371672 53 '0092544943 3 '3235303633 53 '0 4 '2408178777 54 '0089479856 4 '2390270452 54 '0 5 '1902468603 55 '0085374260 6 '1565499709 56 '0083724260 6 '1565499709 56 '0083724260 6 '1545975005 56 '0 7 '1324954297 57 '0081020412 7 '1305063538 57 '0 8 '1144673456 58 '0078424404 8 '1124563888 58 '0 9 '1004568897 59 '0075930656 9 '0984338570 59 '0 11 '0801059558 61 '0071229444 11 '0780774478 61 '0724871271 62 '0069012558 12 '0704620855 62 '0 11 '0801059558 61 '0071229444 11 '0780774478 61 '0724871271 62 '0069012558 12 '0704620855 62 '0 13 '0660482710 63 '0066879033 1'3 '0640295440 63 '0 14 '0605365240 64 '0064824869 14 '05852633390 64 '0	082171837 079147059 079255841 073490710 070844726 068311432 065884819 063559281 061329587 0059190847 0059190847 0059190847 0059190847 0059190847
3 '3251371672 53 '0092544943 3 '3235303033 53 '0092544943 3 '3290270452 54 '0089479856 4 '2390270452 54 '0089479856 5 '1902468603 55 '0086541932 5 '1883545714 55 '0081020412 7 '1324954297 57 '0081020412 7 '1324954297 57 '0081020412 7 '1305063538 57 '0081020412 7 '1305063538 57 '0081020412 7 '1305063538 57 '0081020412 7 '1305063538 58 '0098424404 8 '1124563888 58 '0098424404 8 '1124563888 58 '0098424404 8 '1124563888 58 '0098424869 14 '0780774478 61 '00986774	079147059 076255841 073490710 070844726 068311432 065884819 063559281 061329587 059190847 059190847 055168216 053276021 051458128
4 2408178777 54 0089479856 4 2390270452 54 0086541932 5 1883545714 55 0086541932 6 1565499709 56 0083724260 6 1545975005 56 0083724260 7 1324954297 57 0081020412 7 1305063538 57 008102412 7 1305063538 57 0078424404 8 1124563888 58 0078424404 8 1124563888 58 007892587631 60 0073533959 10 00872305066 60 0087230506 60 0087230506 60 0087230506 60 0087230506 60 0087230506 60 0087230506 60 0087230506 60 0087230506 60 0087230506 60 0087230506 60 0087230506 60 0087230506 60 0087230506 60 0087230506 60 00	076255841 073490710 070844726 0668311432 065884819 063559281 061329587 059190847 057138575 055168216 053276021 051458128
4	073490710 070844726 068311432 065884819 063559281 061329587 059190847 057138575 055168216 053276021
7	070844726 068311432 065884819 063559281 061329587 059190847 057138575 055168216 053276021 051458128
7	068311432 065884819 063559281 061329587 059190847 057138575 055168216 053276021 051458128
7 1324954297 57 0081020412 7 1305063538 57 0 8 1144673456 58 0078424404 8 1124563888 58 0 9 1004568807 59 0075930656 9 0984338570 59 0 10 0892587631 60 0073533959 10 0872305066 60 0 11 0801059558 61 0071229444 11 0780774478 61 0724871271 62 0069012558 12 0704620855 62 0 13 0660482710 63 0066879033 13 0640295440 63 0 14 0605365249 64 0064824869 14 0585263390 64 0	065884819 063559281 061329587 0059190847 057138575 055168216 053276021 051458128
9 1004568897 59 0075930656 9 0984338570 59 0872305066 60 0073533959 10 0872305066 60 0073533959 11 0801059558 61 0071229444 11 0780774478 61 0724871271 62 0069012558 12 0704620855 62 073660482710 63 0066879033 13 0640295440 63 07365240 64 0064824869 14 0585263330 64 0	063559281 061329587 059190847 057138575 055168216 053276021 051458128
9 1004568897 59 0075930656 9 0984338570 59 0 0872305066 60 0 0872305066 60 0 0872305066 60 0 0872305066 60 0 0872305066 60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	061329587 059190847 057138575 055168216 053276021 051458128
11 0801059558 61 0071229444 11 0780774478 61 071229444 11 0780774478 61 071229444 11 0780774478 61 071229444 11 0780774478 61 071229444 11 0780774478 61 071229444 11 0780774478 61 071229444 11 0780774478 61 071229444 11 0780774478 61 071229444 63 07122	059190847 057138575 055168216 053276021 051458128
12 0724871271 62 0069012558 12 0704620855 62 0 13 0660482710 63 0066879033 13 0640295440 63 0 14 0605365249 64 0064824869 14 0585263390 64 0	057138575 055168216 053276021 051458128
12	055168216 053276021 051458128
14 0605365249 64 0064824869 14 0585263390 64 0	053276021 051458128
14 0605365249 64 0064824869 14 0585263390 64 0	051458128
15 0557664561 65 0062846310 15 0537665805 65 0	
16 0515989886 66 0060939830 16 0496108493 66 0	049710995
	048031288
	046415871
	044861787
20 0391471287 70 0053971168 20 0372157076 70 0	043366251
21 0367873272 71 0052378997 21 0348717765 71 0	041926632
22 0346466060 72 0050841652 22 0327473948 72 0	040540446
	039205345
	037919109
25 0202750200 75 0046535805 25 0274278710 75 0	036679633
	035484929
27 0263768721 77 0043899655 27 0245642103 77 0	034333105
	033222371
	032151027
	031117457
31 0217390024 81 0039124812 31 0199989288 81 0	030120127
12 10207683122 82 10038025403 32 10190466183 82 10	029157577
33 0198593818 83 0036960837 33 0181561219 83 0	028228417
	027331326
35 0182055822 85 0034931011 35 0105392916 85 0	026465042
36 10174515767 86 10033963292 36 10158037942 86 10	025628365
27 D167408001 87 0033025480 37 0151116244 87 0	024820151
38 0160701179 88 0032116510 38 0144593401 88 0	024039306
39 0154361533 89 0031235310 39 0138438516 89 0	023284787
	022555599
41 0142678555 91 0029552302 41 0127124089 91 0	021850789
42 0137287567 92 0028748628 42 0121916731 92 0	021169449
43 0132168832 03 0027968996 43 0116981103 93 0	020510708
44 0127303682 94 0027212571 44 0112298469 94 0	019873733
	019257729
45 0122675105 95 0020478552 45 0107851757 95 0 46 0118267567 96 0025766173 46 0103625378 96 0	018661933
47 0114066855 97 0025074697 47 0099605065 97 0	018085613
	017528070
49 0106234846 99 0023751667 49 0092131383 99 0	016988633
	016466659

TABLE V. Redemption Fund necessary to produce £1 in n years at the following rates per cent.

Years	31 per cent.	Years	3} per cent.	Years	3} per cent,	Years	34 per cent.
1	1.0000000000	51	0079081725	1	1.0000000000	SI	0073215641
2	. 4920045476	52	0076010287	2	4914004914	52	0070242854
3	*3227307792	53	0073079716	3	*3219341806	53	0067409979
4	2381372828	54	0070281934	4	2372511395	54	0064708979
Ė	1874155909	55	0067609454	1 61	1864813732	55	0062132297
<u>5</u>	1536299447	56	0065055321	5	1526682087	56	0059672981
7	1295220120	57	0062613065		1285444938	57	0057324549
7	1114626472	38	0060276663	7 8	1104766465	38	0055080966
	0974355561		0058040498		1104/004051		0052936605
9	0862310733	59 60	0055899327	10	0852413679	59	0050886213
	0002310733		0055099327		00524130/9		00500002,15
11	0770793519	61	0 053848252	11	0760919658	61	·004892488 2
12	0694671846	62	0051882685	12	0684839493	62	0047048020
13	0630392523	63	0049998334	13	0620615726	63	0045251325
14	0575417594	64	0048191173	14	0565707287	64	0043530765
15	0527885769	65	0046457423	15	0518250694	65	0041882558
í	0486401341	66	0044793534	16	0476848306	66	0040303148
17	0449896669	67	0043196168	17	0440431317	67	0038789193
18	0417541470	68	0041662182	18 l	0408168408	68	0037337550
19	0388680383	69	0040188617	19	0379403252	69	
19	0362788848	70	0038772683	20	0353610768	70	°0035945255 °0034609517
21	0339442356	71	0037411746	21	10330365869	71	0033327702
22	0318293586	72	0036103320	22	0309320742	72	0032097323
1				23	0290188043	73	0032097323
23	0299055555	73	0034845054	1	,		
24	0281489054	74	0033634725	24	0272728303	74	0029781601
25	0265393258	75	0032470228	25	0256740354	75	0028691934
26	0250598100	76	0031349574	26	0242053963	76	0027645039
27	0236958807	77	0030270874	27	0228524103	77	10026639029
28	0224351188	78	0029232333	28	·0216026452	78	0025672117
29	0212668234	79	0028232256	29	0204453825	79.	0024832606 474
•	0201817174	80	0027269026	30	0193713316	80	0023848887
31	0191717180	81	0026341111	31	0183723998	81	0022989429
32	182297550	82	* 0025447051	32.	·0174415048	82	0022162781
33	10173496132	83	0024585460	33	0165724220	83	0021367560
34	~165258 003	84	0023755019	34	0157596583	84	0020602452
35	0157534809	85	0022954470	35	0149983473	85	0019866205
36	0150283131	86	0022182616	36	0142841628	86	0019157629
37	0143464505	87	0021438315	37	0136132454	87	0018475589
38	0137044457	88	0020720479	38	0129821414	88	0017819002
39	0130992039	89	0020028067	39	0123877506	89	0017186838
ó	0125279401	96	0019360090	40	0118272823	96	0016578111
ţı	0119881387	91	0018715599	41	0112982174	91	0015991884
42	0114775251	92	0018093692	42	0107982765	92	0015427259
٠,	0109940346	93	0017493500	43	0103253914	93	0014883379
13	0105357906		001/493500		0098776816		0014359428
4	010535/900	94		44		94	
15	0101010826	95	0016354999	45	***************************************	95	0013854621
16	0096883484	96	0015815142	46	0090510817	96	0013368213
17	0092961589	97	0015293902	47	0086691944	97	0012899487
18	0089232032	98	0014790587	48	0083064580	98	0012447758
19	0085682777	99	70014304533	49	<i>-</i> 0079616 6 65	99	0012012372
0	0082302744	100	0013835101	50	0076337096	100	0011592702
			-	•			

Redemption Fund necessary to produce £1 in n years at the following rates per cent.

Years	4 per cent.	Years	4 per cent,	Years	41 per cent.	Years	41 per cent.
ī	1.0000000000	51	0062588497	1	1 '0000000000	51	0057793980
2	4901960784	52	0059821236	2	4895858012	52	005513215
3	3203485392	53	0057191451	1 3	'3195596844	53	005260642
4	2354900454	54	0054691025	4	2346150491	54	0050208438
5	1846271135	55	0052312426		1837070439	55	0047930729
5	1507619025	56	0050048662	5	1498173286	56	0045766300
	1266096121	57	0047893234	7	1256522089	57	004370864
7 8	1085278320	58	0045840087	7 8	1075649275	58	004175170
9	0944929927	59	0043883581	9	0935294356	59	003988984
1ó	0832909443	60	0042018451	1ó	0823301166	60	003811778
11	0741490393	61	0040239779	111	0731933807	61	0036430616
12	0665521727	62	0038542964	12	0656034888	62	003482374
13	0601437278	63	0036923701	13	0592033981	63	0033292857
14	0546689731	64	0035377955	14	0537380572	64	003183393
15	0499411004	65	0033901939	15	0490204277	65	003044318
16	0458199992	66	0032492100	16	0449102239	66	002911706
17	0421985221	67	0031145099	17	0413001642	67	002785224
18	0389933282	68	0029857795	18	0379785883	68	002664559
19	0361386184	69	0028827231	19	0352642692	69	002549416
20	0335817503	70	0027450623	20	0327198351	70	002439517
21	0312801054	71	0026325344	21	10304308333	71	002334601
22	0291988111	72	0025248919	22	0283623442	72	002234422
23	0273090568	73	0024219008	23	0264855182	73	002138746
- 24	0255868313	74	0023233403	24	0247763107	74	002047355
25	0240119628	75	0022290015	25	0232145232	75	001960040
26	0225673805	76	0021386869	26	0217830598	76	001876606
27	0212385106	77	0020522095	27	0204673559	77	001796867
28	0200129752	78	0019693922	28	0192549241	78	001720655
29	0188799342	29	0019093922	29	0181349985	79	001/20033
30	0178300991	80	0018140755	30	0170983084	80	001578112
31	0168553524	81	0017412661	31	0161365371	81	· 001511488 ;
32	0159485897	82	∞16714957	32	152427549	82	001447770
33	0151035665	83	0016046284	33	0144106446	83	001 386822
- 34	0143147715	84	0015405351	34	0136346858	84	0013285186
35	0135773224	85	0014790927	35	0129099878	85	0012727350
36	0128868780	86	0014201848	36	0122322015	86	001219361
37	0122395655	87	0013637001	37	0115974477	87	001682844
38	.0116319191	88	0013095329	38	0110022538	88	001119402
39	0110608274	89	0012575828	39	0104435029	89	001072615
40	0105234893	90	0012077538	40	0099183887	90	001027830
41	0100173765	91	°0011599547	41	0094243778	91	0009849569
42	0095402007	92	0011140984	42	0089591781	92	000943911
43	0090898859	93	0010701020	43	0085207094	93	000904611
44	0086645444	94	0010278867	44	0081070805	94	000866980
45	0082624558	95	0009873767	45	0077165675	95	000830944
46	0078820488	96	0009485002	46	0073544897	96	0007964344
47	0075218855	97	0000111884	47	0069987268	97	0007633827
48	0071806476	98	0008753757	48	0066686377	98	0007317257
49	0068571240		0008409996	, ,	0063561161		0007014029
80	0005502004	99 100	2008080000	49 50	0000000458	99	0006723562

TABLE V.

Redemption Fund necessary to produce £1 in n years at the following rates per cent.

	Years	41 per cent.	Years	41 per cent.	Years	5 per cent.	Years	. 5 per cent.
	1	1.0000000000	51	0053323191	I	1,0000000000	51	0045286697
	2	.4889975550	52	0050767923	2	4878048780	52	.0042944966
8	3	·31 ø 7733 5 82	53	0048346867	3	·3172085646	53 1	0040733368
	4	2337436479	54	0046051886	4	·2320118326	54	0038643770
	5	1827916395	55	0043875437	5	1809747981	55	·0036668637
	6	1488783875	56	0041810518	6	1470174681	56	0034800978
	7	1247014680	57	0039850622	7 8	1228198184	57	0033034300
	8	1066096533	58	0037989695	8	1047218136	58	0031362568
	9	0925744700	59	0036222094	9	0906900800	59	2002 9780161
	70	0813788217	60	0034542558	10	0795045750	60	0028281845
	11	0722481817	61	0032946176	11	0703888915	61	0026862736
	12	646661886	62	0031428356	12	0628254100	62	·0025518273
	13	0582753528	63	0029984802	13	0564557652	63	°0924244 196
	14	0528203160	64	7002861 1494	14	0510239695	64	0023036520
	15	0481138081	65	0027304661	15	0463422876	65	0021891514
	16	044 0153695	66	0026060769	16	0422699080	66	100 20805683
	17	0404175833	67	10024876496	17	0386991417	67	·0019775751
	18	0372368975	68	0023748725	18	0 35546222 3	68	1 0018798643
	19	0344073443	69	0022674523	19	0327450104	69	0017871473
	20	0318761443	70	0021651129	20	0302425872	70	-0 016991530
	21	10296005669	71	0020675946	21	0279961071	71	0016156265
	22	0275456461	72	0019746524	22	0259705086	72	0015363280
	23	0256824930	73	0018860556	23	0241368219	73	0014610318
	24	0239870299	74	0018015863	24	0224709007	74	0013895254
	25	0224390280	75	0017210390	25	0209524573	75	0013216085
	26	0210213675	76	0016442194	26	0195643207	76	0012570925
	27	0197194616	77	0015709439	27	0182918599	77	0011957993
	28	0185208051	78	.0012010391	28	0171225304	78	0011375610
	29	0174146147	79	0014343408	29	0160455149	79	0011061609 0822
	30	0163915429	80	0013706935	30	O150514351	80	0010296235
	31	0154434459	81 82	0013099502	31	0141321204	81	0009796332
	32	0145631962	1 1	0012519715	32	0132804189	82	0009321143
	33	0137445281	83	0011966252	33	0124900437	83	°0008869406
	34	0129819119	84	0011437861	34	O117554454	84	0008439924
	35	0122704478	85	0010933355	35	0110717072	85	0008031567
	36	0116057796		0010451606	36	0104344571	86	0007643265
	37	0109840206	87	0009915434	37	0098397945	87	0007274005 9/6+
	38	0104016920	88	00009452152	38	0092842282	88	0006922828 9324
	39 40	°0098556712 °0093431466	90	0009132468 0008731573	39 40	0087646242 0082781611	89	0000588825
	41	0088615804	91	0008348597	41	0078222924	91	·0005968946
	42	0084086759	92	0007982710	42	0073947131	92	0005681481
	43	0079823492	93	0007633126	43	0069933328	93	0005408008
	44	0075807056	94	0007299095	44	0066162506	94	0005147832
	45	0072020184	95	0006979905	45	0062617347	95	000314/032
	46	00684.17107	96	0006674877	46	0059282036	96	0004664770
	47	0065073395	97	0006383364	47	0056142109	97	0004440666
	48	0001885821	98	0006104754	48	0053184306	98	0004227418
	49	0058872235	99	0005838459	49	0050396453	99	0004024492
		0056021459	100	0005583922	50			
1	50	-0050021459	TAG	000 5503922	1 50	0047767355	100	.0003831381

Redemption Fund necessary to produce £1 in n years at the following rates per cent.

Years	10 per cent.	12 per cent.	15 per cent.	18 per cent.	20 per cent.	Year
1	1.0000000000	1.00000000001	1.0000000000	1.0000000000	1.0000000000	ı
2	4761904761	4716981132	4651162790	4587155063	4545154545	2
3	'3021148036	2963489805	2879769618	2799238607	2747252747	3
4	2154708037	2092344363	2002653515	1917387036	1862891207	4
	1637974807	1574097319	1483155524	1397778418	1343797033	
5	1296073803	1262257184	1142369065	1059101292	1007057459	5
7	1054054997	0991177359	0903603634	0823619993	0774239263	7
8	0874440175	0813028414	0728500896	0652443589	0606094224	8
		0676788887				
9 10	0627453949	0569841642	0599574015	0523948239	0480794617	10
11	0539631420	0484154043	0410689830	0347763862	0311037942	11
12	0467633151	0414368076	0344807761	0286278089	0252649649	12
13	0407785238		0291104565	0236862073	0206200011	13
_		0356771951	0246884898	0196780583	0168930552	
14	0357462232				0138821198	14
15	0314737769	0268242396	0210170526	0164027825		15
16	0278166207	0233900180	0179476914	0137100839	0114361350	16
17	0246641344	0204567275	0153668623	0114852711	.0094401469	17
18	0219302222	0179373114	0131862873	0096894570	0078053857	81
19	0195468682	0157630049	0113863504	0081028390	10063624532	19
20	0174596248	0138787800	0097614704	0068199812	0053865307	20
21	0156243898	0122400915	0084167914	0057464327	.0044439388	21
22	10140050629	1008105088	0072657713	0048462577	· 0 036896187	22
23	0125718127	0095599650	0062783947	0040901996	0030652575	23
24	0112997764	0084634417	0054298296	0034542973	0025478730	24
25	0101680722	0074999698	0046994023	0029188261	0021187290	25
26	0091590386	0066518581	0040698058	0024674779	0017624956	26
27	0082576423	0059040937	0035264815	0020867195	0014665923	27
28		0052438691	0030571309	0017652846	0012206684	28
	0074510132			1	0010161900	
29 30	0067280747	0046602068	0026513265	0014937692	0010101900	30
31	0054962193	0036860570	0019961796	0010702987	0007045936	31
- 1	0049411167	0032803263	0017328006	0000062108	2005868168	
32		, , ,				32
33	.0044994063	0029203096	.0015045161	.0007673859	0004875834	33
34	.0040737064	0026006383	0013065655	0006499044	0004071466	34
35	0036897051	.0023166193	0011348546	0005504633	0003391738	35
36	•0033430638	0020641406	0009858572	0004662768	1 20002825649	36
37	.0030299405	0018395924	0008565329	0003989937	0002354154	37
38	.0027469250	0016397998	0007442569	.0003346284	0001961410	38
39	0024909840	9014619665	0006467613	0002835030	0001634241	39
40	0022594144	0013036256	10005620850	0002401991	0001361682	40
41	0020498028	0011625982	0004885308	0002035171	0001134606	41
42	1100018599911	0010369577	.0004246290	0001724424	00000945416	42
43	0016880466	0009249987	0003691063	0001461163	0000787784	43
44	0015322365	0008252102	0003208590	0001238120	0000656444	44
45	0013910047	0007362523	0002789300	0001049144	0000547007	45
46	0013910047	0006569363	0002424890	0000889026	0000455818	46
		0005862064	0002424090	10000758355		
47	0011868221				0000379834	47
48	0010414797	0005231248	0001832843	0000638396	0000316518	48
49	°0009459041	90004668576	0001593523	70000540984	10000263758	49
50	0008591740	0004166635	°0001385480	*0000458440	0000219794	5Q.

N.B. The above Table for rates of interest of 10, 12, 15, 18, and 20 per cent. was employed in calculating the Old Present Value Table of £1 per annum given in Table XII., but it is evident that it could not be applied practically for the Redemption of Capital.

Redemption Fund necessary to produce £1 in n years, payments being made Half-yearly and Quarterly, at the following rates per cent.

	3 per	r cent.	Τ.	3 pc	er cent.	11	31 p	er cent.	1	Słp	er cent.
Years' Duration	Redemp	tion Fund.	Years' Duration		tion Fund.	Years' Duration		tion Fund.	Years' Duration	Redemp	tion Fund.
85 E	Payments	being made	2 5	Payments	being made	25	Paymente	being mad		Payments	being made
, A	Half- yearly	Quarterly	, A	Half- yearly	Quarterly	l A	Half- yearly	Quarterly	/ A	Half- yearly	Quarterly
.1	992556	988820	51	008413	008352	1	991941	987895	51	007781	007718
2	488890	487022	52	008099	008040	2	487976			007478	1
. 3	321050	319806		007800		3	320046	1 . 2777		007188	
4	237168	236235	54	007514	1	4	236125	1	1	.006911	1 20
5	186868	186123	55	007240		5	185807	185000		006647	, , , , ,
6	153360	152739		006978		ó	152291			006395	
7	129447	128915	57	006728	006676	7	128375	127800	57	1006154	0061CO
8	.111230	111065	58	006488	006437	8	110461	109958	58	005923	005870
9	097612	·c97199	,	006258	.006208	9	096546	1 5	1	1005702	
10	086492	086121	60	006037	2005989	10	085432	1	1 .	005490	1
11	077407	077070	61	005826	·005779	11	076354			005288	005240
12	069848	069540	62	005623	·005577	12	068804		62	1005094	
13	063464	063180	63	005428	· 205383	13	062428	062122	63	004908	
14	058002	057739	64	005241	005197	14	056976			004730	004685
15 16	053278	053033	65	005061 004888	005019	15	052262 048147			004558	004515
17	045524	046923	67	004722	004682	17	046147	047900	67	004394	004195
18	043324	042102	68	004563	004523	18	044327	041100	68	004237	004045
19	039432	039241	69	004409	004371	19	038457	038250	69	003940	1
20	036854	036673	70	004262	004224	20	035889	035694	70	003800	003762
2Ì	034529	034356	71	004119	004083	21	033575	033389	71	003666	
22	032421	032257	72	003982	003947	22	031478	031302	72	003537	003501
23	030503	030346	73	1 28500	003816	23	029571	029403	73	003413	003378
24	028750	028601	74	003724	003689	24	027829	027669	74	003294	003259
25	027143	·027001	75	1003601	003568	25	026234	026080	75	003179	003146
26	025666	025529	76	·co3483	003451	26	024767	024620	76	003069	·003036
27	024303	024172	77	003370	·003338	27	2023415	1023275	77	·co2963	.002931
28	023042	022916	78	003260	003229	28	022166	022031	78	002860	002829
29	021873	021752	79	·003154	003124	29	021008	020878	79	002762	002731
30	020787	020670	80	003052	.003023	30	:019933	019808	80	002667	002637
31	619775	019663	81	002954	1002925	31	O18932	018812	81	002576	002547
32	018831	018722	82	002859	.002831	32	17999	017883	82	002488	002460
33	017948	017843	83	.002767	002740	33	017127	017015	83	.002403	002375
34	017121	017020	84	002679	002652	34	016311	016203	84	002321	002294
35 36	016345 015616	1016247 1015521	85 86	·002594 ·002511	002567 002485	35 36	015546 014828	1015442 1014727	85 86	·002243	002216 002141
37	014930	014838	87	002432	002406	37	014153	014/2/	87	002107	002069
38	014283	014195	88	002355	2002330	38	013517	013423	88	002023	.001999
39	01 3673	013587	89	002280	002256	1	012918	OI 2827	89		001931
40	01 3097	013014	9ó	002208	002185	40	012352	012264	90		oo 1866
41	012552	012471	91	002139	002116	41	818110	011732	91	001826	001803
42	012036	011958	92	002072	002050	42	011312	011229	92	001765	001743
43	011547	011471	93	002007	·001985			°010753	- 1		001685
44	011083	011009	94	001944	001923		010380	010302	94		∞1628.
45	010642	010571	95	001884	·001863		009950	009875	95	2711	001574
46	010224	010154	96	.001822	·208100·			009468		<i>-</i> , ,	001521
47	009826	009758	97		·001748		2 2 1	,000083		.,,	001471
48		009381	98	001714	001694		008785	008716	98		001422
49		009021	99	.001661	001641			008367			001375
30	008741	2000/9	- VV	001609	m1291	50	0001001	VV0034 I	TOO!	001347	~1,529 _,
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Redemption Fund necessary to produce £1 in n years, payments being made Half-yearly and Quarterly, at the following rates per cent.

	J 91 m	r cent.	, 	,	r cent.		93.50	B race I	1	98 70	r cent.
Years' Duration			Years' Duraction	<u> </u>		Years' Duration		er cent.	2 €		
57	Payments	tion Fund. being made	8 2		ion Fund. being made	1 1 1		ion Fund. being made	Years' Duration	Payments	ion Fund. being made
PA	Half-	Quarterly	조직	Half-	Quarterly	PA	Half-	Quarterly	MA	Half-	Quarterly
	yearly	4]	yearly	4444		yearly			yearly	
1	991326	986970	51	007189	007123	1	990712	986047	51	006636	006568
2	487065	484888	52	006896	006832	2	486155	483823	52	006353	006287
3	319045	317594	53	006616	006554	3	318047	316493	53	006084	006019
4	235086	233999	54	2006350	1006289	4	234051	232887	54	005827	2005 765
5	184751	183882	55	006096	006037	5	183699	182769	55 56	2005583	°005523
	151228	150504	56	005853	005796	I	150170	149396	56	2005350	005292
7	727311	126692	57	005621	005566	7	126254	125591	57	005129	005072
8	.109399	108858	58	005400	005346	8	108346	107767	58	004917	004862
9	095490	005010	59	205189	005136	9	094443	1093929	59	004715	2004 661
10	084382	083951	60	004986	004935	10	083343	082882	60	004522	004470
11	075313	074922	61	004793	004743	II	074282	073864	61	004338	004288
12	067771	067414	62	004608	004560	12	066751	~ 66368	62	004163	004113
13	061405	061076	63	004431	004384	13	060396	060044	63	003995	003947
14	055963	055658	64	·004262	004216	14	1054964	1054639	64	003834	· 00 3788
15	051260	050976	65	004099	004055	15	050272	049969	65	503680	1003 635
16	047156	046891	66	°003944	003900	16	046181	045898	66	1003534	1003490
. 17	043547	043298	67	·003795	003752	17	042584	042319	67	003393	003351
18	040350	040116	68	003652	003611	18	039399	039150	68	003259	003217
19	037500	037279	69	003515	003475	19	036561	036326	69	003130	003090
20	034944	~34735	70	∞ 3383	· 00 3344	20	034018	033796	70	003007	002968
21	032641	O32443	71	003257	003219	21	031728	031517	71	002888	002851
22	030556	ღვ 0368	72	°003136	2003099	22	029656	029455	72	002775	002739
23	028661	028481	73	003020	002984	23	O27773	027582	73	002667	002631
24	026931	026760	74	002908	002874	24	026056	025874	74	002563	002522
25	025348	025184	75	002801	002767	25	·024486	024312	75	002463	002430
26	023893	:023737	76	002698	002665	26	023044	022878	76	002368	002335
27 28	022553	022403	77 78	002599	002567	27 28	021717	021558	77	002276	002244
	021316	021172		002505	002473	20	020492	020340	78	002188	002157
29 30	019107	018974	79 80		002383	30	019359 018308	019213 018168	79 80	002104	002074
	1 - 1		81	002325					81		001994
31	811810	017990	82	002241	002212	31	017332	017197	82	001946	001917
32	017196	017074 016218	83	002160	002132	32	016423	016293	83	001871	001844
33	016336	015418	84	002007	002055	33	015575 014783	015450 014663	84	001731	001773
34	015532 014779	014668	85	001935	001900	34 35	014/03	013926	85	·001/31	001705 001640
35 36	014072	013966	86	·001865	001840	36	013348	013236	86	001602	001577
37	013408	013306	87	001798	001774	37	012696	012588	87	001541	001517
38	012784	012685	88	001734	001710	38	012084	011980	88	001482	001459
39	012196	012100	89	001672	001649	39	807110	011407	89	001426	001404
40	011642	011549	90	001612	001590	40	010965	898010	9ó	001372	.001321
41	011110	011020	91	001555	001533	41	010454	010360	91	001321	001299
42	010625	010537	92	001100	001478	42	009971	009880	92	001271	001250
43	010157	010073	93	001446	001425	43	.009212	009427	93	001223	001203
44	2009715	009633	94	001395	001375	44	009084	2008000	94	001177	001157
45	009295	009216	95	001346	001326	45	008676	008594	95	001133	001114
46	868800	008821	96	001298	001279	46	008290	008210	96	001000	001072
47	008520	008446	97	001252	001233	47	007924	007846	97	001049	201031
48	008162	008090	98	°001208	001100	48	007576	007501	98	00101Ó	000993
49	007822	007751	99	·001165	001148	49	007247	007174	99	000972	000955
50	7498	99 7430	100	001124	001107	50	006933	006863	100	000936	000920

TABLE V.

Redemption Fund necessary to produce £1 in n years, payments being made Half-yearly and Quarterly, at the following rates per cent.

	4 per	r cent.		4 per	cent.	1 2	41 per	r cent.	1 .	41 pe	r cent.
Years' Duration		ion Fund.	Years' Duration	Redemp	ion Fund.	Years' Duration	Redemp	tion Fund.	Years' Duration	Redemp	tion Fund.
Z er	Payments Half-	being made	Nº E	Payments Half-	being made	F	Payments Half-	being made	S E	Payments Half-	being made
	yearly	Quarterly	A	yearly	Quarterly	A	yearly	Quarterly	P	yearly	Quarterly
1	-990099	985124	51	006199	10 06049	1	989487	984203	51	005636	.005565
2	485248	482761	52	005846	005779	2	484342	481701	52	005375	005306
3	317052	315395	53	005588	005522	3	316059	314300	53	005127	005060
4	233020	231778	54	005342	005278	4	231992	230674	54	004891	004827
5	182653	181661	55	005108	005046	5	181612	180559	55	004668	004605
	149119	148294	56	.004885	004825	6	148074	147198	56	004456	004395
7 8	125204	124498	57	004673	004615	7 8	124161	123411	57	004254	004195
	107300	106684	58	.004472	004416		106263	105608	58	004062	004005
- 9	093404	092857	59	004279	004225	9	092375	091795	59	∞ 3879	003824
10	.082313	.081855	60	004096	004043	10	081294	080773	60	003706	003653
11	073263	072818	61	003922	· 00 3870	11	072254	071782	61	003540	003489
12	065742	1 2005	62	003755	003705	12	064746	064314	62	003383	.003333
13	059399	059024	63	.003596	003548	13	058414	058018	63	003233	.003185
14	053979	053633	64		003398	14	053008	052641	64	.003090	003044
15	049300	048978	65		003254	15	048342	048001	65	002954	.002909
16	045221	044921	66	003161		16	044277	043959	66	.002824	002781
17 18	041637	041356	68	003029	002987	17 18	040707	040409	67 68	002701	002658
19	035641	038201	69	002903		19	037550	037270		002583	002542
20	033112	035391	70		002743	20	034739	°034475	69 70	002470	002431
	1		1		1	11			ł		002324
21 22	030835		71	002557	002520	2 I 2 2	029961	029725	71	002260	002223
	1	1	72	002452	002415	11	027917	027693	72	002162	002127
23 24	026907	026705	73	002351	002316	23 24	026062	025850 024171	73	002069	002034
25	023646	023463	75	002255	002220	25	022830	022637	74	001900	001946
26	023048	023403	76	002074	002042	26	021416	021232	75 76	001813	001782
27	020905	020737	77	.001080	001958	27	020117	019941	77	001736	001705
28	019693	019533	78	800100	001878	28	018920	018751	78	.001991	.001633
29	018573	018420	79	.001831	001802	29	017814	017653	79	001590	001562
3ó	017536	017388	80	001757	001728	3ó	016790	016636	8ó	001522	001495
31	016573	016431	81	001686	001658	31	015841	015693	81	001458	001431
32	015677	015541	82	819100	165100	32	014959	014817	82	.001396	001370
33	014842	014712	83	001552	001526	33	014138	014002	83	.001336	
34	014064	013938	84	001490	001465	34	013373	013241	84	001280	.001255
35	OI 3335	013214	85	001430	001405	35	012658	012532	85	001225	001202
36	·012654	012537	86	1001372	001349	36	011990	.011868	86	001174	.001121
37	012015	011902	87	1001317	.001294	37	011364	O11247	87	.001124	001102
38	011415	.011306	88	·001265	.001242	38	010777	·010664	88	.001077	.001022
39	010852	010747	89	001214	.001192	39	010226	911010	89	.001031	110100
40	010321	010220	90	.001199	·001145	40	.009709	.009604	90	.000988	·000968.
41	009822	009724	91	-001119	.001099	41	009223	009122	91	000946	000927
42	009352	009257	92	.001074	·001055	42	.008764	.008667	92	.0009c6	888000
43	806800	918800	93	001032	.001013	43	.008333	008239	93	988000°	.000820
44	008488	008400	94	.000991	000972	44	007926	.007835	94	000832	.000814
45	008092	008007	95	000951	.000933	45	007541	007454	95	7000797	.000780
46	007717	007635	96	000913	.000860	46	007178	007093	96	000763	.000747
47 48	007362	007283	97 98	000877 000842	000826	47 48	006835 006510	·006753	97	000731	1000716
49	00/020	000949	99	.000842	0000793	49	000510	006127	98 99	000701	·000686
	006406				000762		005912		100	.000643	.000622
1	-344001		,	///	,			ا ماردد.		220043	

Redemption Fund necessary to produce £1 in n years, payments being made Half-yearly and Quarterly, at the following rates per cent.

d	41 pe	r cent.	-	41 pe	r cent.		42 pe	r cent.	-	43 pe	r cent.
Years' Duration		ion Fund.	Years' Daration		ion Fund.	Years' Duration	Redempt	ion Fund.	Years' Duration		ion Fund.
Yes	Payments Half-	being made	Yes		being made	Year	Payments Half-	teing made	Yes	Payments Half-	being made
A	yearly	Quarterly	А	Half- yearly	Quarterly	A	yearly	Quarterly	A	yearly	Quarterly
1	988875	983282	51	005187	005115	1	988264	982363	51	004770	004696
2	483438	480643	52	.004937	.004867	2	482536	479587	52	004530	004459
3	315070	.313208	53	.004699	004632	3	314084	312119	53	004303	004235
4	230969	229575	54	'004475	'004409	4	229950	228479	54	004089	004024
5	180575	179461	55	004261	004198	5	179544	178369	55	003886	003823
6	147035	146108	56	004059	.003998	6	146002	145024	56	003694	003633
7 8	123125	122332	57	003867	.003800	7	122095	121260	57	003512	003453
8	105233	104541	58	.003685	.003628	8	104212	103483	58	003340	003283
9	'091354	147000	59	.003512	003457	9	'090343	089697	59	'003176	003122
10	080284	079734	60	.003348	003295	10	079284	078705	60	120800.	002969
11	071256	070758	61	.003192	.003141	11	070269	069745	61	002874	002824
12	063761	063305	62	.003044	002994	12	062787	062308	62	.002735	002686
13	057443	057024	63	.002903	002855	13	056484	056044	63	002603	002556
14	.052051	051664	64	002768	'002722	14	051107	050700	64	002477	002432
15	047399	047039	65	002641	002596	15	046470	046092	65	002358	002314
16	043348	043013	66	002520	002476	16	042435	042083	66	002245	'002202
17	039793	039479	67	*002404	002362	17	038895	038566	67	002137	.002096
18	036650	036356	68	002294	002254	18	035768	035459	68	002035	,001996
19	033855	033578	69	002189	'002151	19	032989	032698	69	001938	001900
20	.031355	031093	70	.002090	'002052	20	.030504	030230	70	001845	.001809
21	'029107	028860	71	.001992	001958	21	028260	028014	71	001758	001722
22	027078	026843	72	001904	001869	22	026259	026014	72	001674	.001640
23	025238	025016	73	818100.	.001784	23	024436	'024203	73	.001595	001562
24	023565	.023353	74	001736	021703	24	022778	.022556	74	001519	001488
25	022037	021835	75	001657	.001626	25	021265	021055	75	001448	001417
26	.020638	020445	76	001583	'001552	26	019882	189610	76	.001379	.001350
27 28	.019353	019169	77	'001512	001482	27	018613	018422	77	.001314	001286
29	017080	017995	78	001444	001415	28	017446	017263	78	001252	001225
30	01/080	015910	79	001379	1001351	29 30	016370	016195	79 80	001194	001167
31	015136	014982	81	001258	001233	31	014457	014297	81	.001084	.001060
32	014268	014120	82	'CO1202	'001177	32	013604	013451	82	001033	001010
33	013461	013320	83	001148	001124	33	012812	012665	83	0000985	0000962
34	012710	012574	84	.001097	001074	34	012075	011934	84	.000939	.000917
35	'012009	011878	85	001048	001026	35	011388	011253	85	000895	000874
36	011355	011229	86	.001003	.000980	36	010748	010618	86	000853	000833
37	010742	010621	87	.000957	.000936	37	010150	010025	87	000813	.000794
38	.010169	010053	88	.000015	.000894	38	009590	009470	88	.000776	000757
39	009632	1009520	89	000874	000855	39	.009066	.008921	89	000739	'000721
40	.000158	009020	90	.000832	.000812	40	008576	008465	90	000705	.000688
41	008654	008550	91	000798	.000780	41	.008112	.008000	91	000672	.000655
42	.008208	.008108	92	.000763	'000745	42	.007683	007580	92	.000641	.000622
43	007789	007693	93	000729	000712	43	007276	007178	93	119000-	.000296
44	007395	.002 305	94	.000697	.000081	44	.006894	.006799	94	.000283	.000568
45	007023	.006933	95	.000666	.000650	45	.006535	006443	95	.000556	'000541
46	006672	.006585	96	.000637	.000023	46	.006196	.000108	96	.000230	.000216
47	.006340	006257	97	000609	'000594	47	.005877	005792	97	.000505	000492
48	006027	005947	98	.000282	.000268	48	.005575	005494	98	000482	.000469
49	005732	.005654	99	.000556	.000243	49	.005291	.002513	99	000460	'000447
50	005452	005377	700	000532	.000210	50	005023	004947	100	000438	000426

TABLE V.

Redemption Fund necessary to produce £1 in n years, payments being made Half-yearly and Quarterly, at the following rates per cent.

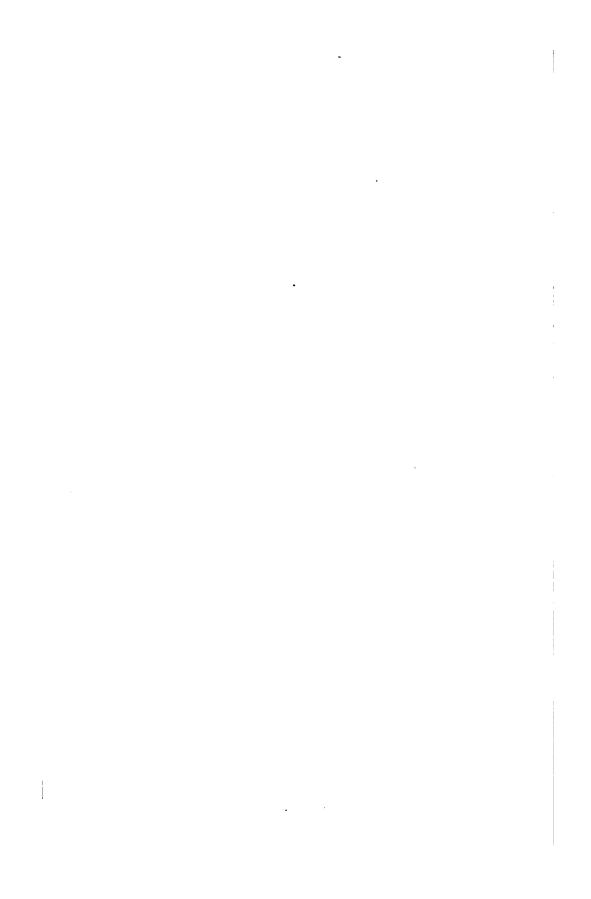
									_		
р	5 per	cent.	0	5 per	cent.		5 per	cent		5 per	cent.
Years' Duration		ion Fund. being made	Years' Duration		ion Fund. being made	Years' Duration		ion Fund. being made	Years' Duration	Redempt Payments	ion Fund.
P D	Half- yearly	Quarterly	Dark	Half- yearly	Quarterly	Day	Half-) early	Quarterly	P	Half- yearly	Quarterly
1	987654	981444	26	019149	018941	51	004381	004308	76	001200	001172
2	481636	478533	27	017896	017697	52	004153	004082	77	001141	001114
3	313100	311033	28	016745	016555	53	003937	003869	78	280100	001059
4	228935	227387	29	015685	015504	54	003733	003668	79	001032	001007
5	178518	177282				55	003540	003478		_	
6	144974	143947	30	014707	014534	56	·003358	.003298	80	186000	000957
7	121073	120195	31	·01 3803	013637	57	003186	.003128	81	000933	.000910
8	103198	102432	32	1012965	012807	58	.003023	002967	82	·000887	000865
9	089340	.088601	33	012188	O12037	59	002869	002815	83	000844	000822
10	078294	077686	34	011466	O11321	60	002724	002672	84	000802	000782
			35	010794	·010655		İ	1	85	000763	000743
11	069293	068742	36	801010	·010035	61	002586	002536	86	000726	1000707
12	061826	061323	37	009584	.009457	62	002455	002407	87	000690	000672
13	055538	055076	38	009039	008916	63	002331	002285	88	.000657	000639
14	050176	049750	39	008529	008412	64	002214	002169	89	000625	800000
15	045555	045160	40	008052	007939	65	002103	002060	90	000594	000578
16	041537	041168	Ì			66	001997	001956		-	_
17	038014	037969	41	007605	007497	67	001897	001858	91	000565	000549
81	034903	034580	42	007186	007082	68	001803	001764	92	.000538	000523
19	032140	031836	43	006793	006692	69	001713	001676	93	112000	000497
20	029673	029386	44	006423		70	001628	001592	94	000487	000473
	1	t i	45	006076	005984			1	95	000463	000450
21	027458	027187	46	·005750	2005661	71	001547	·001513	96	000440	000428
22	025461	025205	47	005443	·005357	72	001470	001437	97	000419	·00040 7
. 23	023654	023411	48	005153	005071	73	7001397	·001 366	98	000399	000387
24	022012	021782	49	004881	004801	74	OO1 328	001298	99	000379	000368
25	020516	020297	50	004624	004548	75	263100		100	000361	000350
-	1	1		ł .		1	!	1	l		1

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TABLE VI.

FOR

VALUING MINERAL AND OTHER PROPERTIES.



Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	3½ per cent.	Years	3½ per cent.	Years	4 per cent.	Years	4 per cent,
1	0.06618322	51	22.26740253	1	096153846	51	20.03658861
2	1.89097701	52	22.43436985	2	1.87326550	52	20.17167569
3	2.77671979	53	22.59557501	3	273869682	53	20.30271281
	3.62558079		22 75417147	4	3.26102684	54	20,42984993
4		54					20.22321308
5	4.43957354	55	22'90730687	5 6	4.34316454	55	
	5.22056984	56	23'05612326		5.08776468	56	20.67293462
7 8	5.97031216	57	2 3 °2007573 7	7 8	5°79725504	57	20°7891385 7
	6.69042456	58	23.34134075		6.47386019	58	20.00194379
9	7:38242257	59	23.47800014	9	7.11962227	59	20.81146433
10	8.04772215	60	23.61085761	10	7.73641938	60	2111780963
11	8.68764777	61	23.74003086	11	8.32598178	61	21'22108482
12	9:30343965	62	23.86563316	12	8.88990612	62	21'32139072
13	9:89626037	63	23.98777393	13	9.42966812	63	21.41882435
14	10.46720091	64	24.10655857	14	9 9 4 6 6 3 3 8 3	64	21.51347888
15	11.01728593	65	24.22208884	15	10.44206960	65	21.60544393
16	11.54747897	66	24.33446278	16	10'91715111	66	21.69480559
17	1205868675	67	24.44377517	17	11.37297126	67	21.78164679
18	12.55176339	68	24.22011244	18	11.81054741	68	21.86604730
		69		19	12.530852722	69	21 94808392
19	13.02751416		24.65357791	20		70	22.02783063
20	13.48669891	70	24.75424187		12.63469713	10	22 02/03003
21	13.93003527	71	24.85219178	21	13.02298226	71	22.10535871
22	14'35820146	72	24,94750720	22	13`39645636	72	2218073675
23	14,77183903	73	25.04026212	23	13.75584350	73	22:25403095
24	15.17125533	74	25.13053996	24	14.10182243	74	22.32530510
25	15.55792567	75	25.21840367	25	14.43503005	75	22,39462074
26	15.93149544	76	25.30392583	26	14.75606456	76	22'46203721
27	16.29278205	77	25.38717376	27	1506548845	77	22.52761178
28	16.64227669	78	25.46821272	28	15.36383105	78	22'59139983
29	16.98044595	79	25.24710227	29	1565159098	79	22.65345459
30	17.30773337	80	25.62391340	30	15.92923832	80	22.71382764
31	17.62456084	81	25.69869536	31	16.19721669	18	22'77256882
32	17.93132983	82	25.77150857	32	16.45594495	82	22.82972616
33	18.55845560	83	25.84240844	33	16,70581904	83	22.88534613
1	18.51620375	84	25.91144861		16.94721347	84	22.03347365
34				34	17.18048273	85	22,00512550
35	18.79502035	85	25.97868115	35		86	
36	19.06520381	1 1	26.04415633	36	17.40596268		23.04342368
37	19.32707041	87	26.10792307	37	17.62397170	87	23'09332881
38	19.58092210	88	26.17002861	38	17.83481179	88	23'14190680
39	19.82704736	89	26.23021889	39	18.03876966	89	23.1891957 1
40	20.06572202	90	26,28943833	10	18.23611768	90	23.23523253
41	20.29720981	91	26°34683006	41	18.42711474	91	23.28005217
42	20.52176308	92	26:40273591	42	18.61200708	92	23,32368980
43	20.73962342	93	26.45719651	43	18:79102908	93	23°3691786 1
44	20.95102212	94	26.21025117	44	18 96440389	94	23'40755090
45	21.15618084	95	26.56193812	45	1913234417	95	23.4478380E
46	21.32231505	96	2661229435	46	19.29505267	96	23.48707021
47	21.24861933	97	26.66135594	47	19:45272274	97	23.52527702
	21.23629830	98	26.70915766	48	1960553899	98	23.56248679
48	21/3029020				19'75367772	99	23.20872722
49	21.91853623	99	26.75573351	49		100	23 63402508
50	22.09551334	100	26'80111636	1 50	19:89730725	PAR	~J ∨J4∨≁J V (

Present Value of £1 per Annum in n years; Redemption of Capital being at $2\frac{1}{2}$ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	4½ per cent.	Years	41 per cent.	Years	5 per cent.	Years	5 per cent.
1	0.95693779	53	18:21205168		075238095	51	1669206768
2	1.85588269	52	18.32358828	2	1.83881952	52	16.78571558
3	2.70170112	53	18.43165277	3	266569161	53	16.87635701
4	3.49873146	54	18-53637330	4	3.43857815	54	1696410810
- 7	4.25085376	55	18.62787228		4.16238530	55	17'04907945
5 6	496154872	56	1873626655	5	4.84144343	33	17.13137638
I	5-63394788	57	18.83166781		5.47958928	57	1721109929
7 8	6.52082631	58	18.92418277	7 8	608023432	58	17 28834387
9	6.87488920			11 - 1	6-64642212	1 - 1	17:36320145
10		59 60	1901391350	9	7.18087665	59 60	
	7:44830339	100	19·10095769	10	/ 1000/005	80	17:43575920
11	7.99322457	61	19.18540887	11	7.68604322	61	17.50610040
12	8.51157080	62	1926735653	12	8.16412323	62	17.57430457
13	900509293	63	19*34688653	13	861710383	63	17:64044782
14	9:47539253	64	19:42408108	14	904678341	64	17.70460288
15	9 9 2 3 9 3 7 3 8	65	19:49901911	15	9:45479348	65	1776683941
16	10.35207526	66	19.57177619	16	9.84261767	66	17:82722400
17	. 1076104593	67	1964242497	17	10-21160801	67.	17:88582053
18	11:15199177	68	1971103516	18	10.56299936	68	17:94269018
19	11.52596716	69	19.77767371	19	10.89792172	69	17 99789158
20	11.88394679	70	19.84240495	20	1121741130	70	1805148098
21	12-22683311	71	1990529075	21	11-52241960	73	18-10351236
22	12 5 5 5 4 6 2 8 2	72	1996639050	22	11.81382275	72	18-15403749
23	12.87061282	73	20.02576138	23	1209242802	73	18 20 31 0609
24	13.17300551	74	2008345842	24	12.35898089	74	18.25076593
25	13.46331338	75	20.13953456	25	1261417072	75	18-29706290
26	13.74216331	76	20.10404044	26	12.85863594	75	18.34204111
27	14.01014041	77	20.54405604	27	1309296875	77	18.38574298
28	14.26779137	78	20.29853790	28	13.31771018	78	18.42820937
	14.51562764		20.34862170	29		1 - 1	18.46947945
29 30	14.75412820	79 80	20:39732142	30	13.53339876	79 80	18.20020103
٠. ا		81	0014467047			81	18:148:2011
31	14.98374210	82	20.44467947	31	13793941882	82	18·548 58055 18·58648299
32			20:49073663	32	14.13061819		
33	15.41796996	83	20.53553231	33	14.31446964	83	18 62333211
34	15.62335205	84	20.57910452	34	14.49133585	84	18.65916045
35	15.82138737	85	20.62149001	35	14.66155654	85	1869399940
36	1601240598	86	20.66272415	36	14'82545033	86	1872787914
37	16.19671910	87	2070284121	37	14 98331628	87	1876082890
38	16'37462043	88	2074187420	38	15.13543538	88	1879287677
39	16.54638731	89	20-77985508	39	15.58502101	89	1882404993
40	1671228198	90	20.81681467	40	15.42347469	90	18.85437457
41	16.87255244	91	20.85278281	41	15.55987814	91	18-88387599
42	17:02743351	92	20.88778832	42	15.69150336	92	1891257863
43	17.17714768	93	20 92 1859 12	43	15.81855905	93	18.94050612
44	17.32190580	94	20.95502216	44	15.94124232	94	18.96768125
45	17.46190800	95	20.98730354	45	16.05973953	95	1899412609
46	17.59734425	95	21.01872846	46	16.17422704	96	19.01986190
47	17.72839498	97	21.04932143	47	16.28487178	97	19.04490934
48	17.85523177	98	21.07910600	48	16.39183198	98	1906928826
49	17.97801787	99	21.10810212	49	16.49525768	99	1909301799
777	18.09690851	1 77	1	リーマブ	1 477-7/00	フプ	- 7 ~ 7 3 7 7 7 7 7 7

Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1										
Years	5½ per cent.	Years	51 per cent.	Years	6 per cent.	Years	6 per cent.				
1	0 94786729	51	15:40625632	1	0.94339622	51	14'30437219				
2	1.82206726	52	15:48599780	2	1.80561748	52	14:37 308963				
3	2 6 3 0 6 2 9 3 8	53	15.56311369	3	2.59647753	53	14.43949609				
4	3.38045830	54	15.63770916	4	3.32427051	54	14.50368696				
Ė	407752417	55	15.70988414		3.99605413	55	14.26575270				
5 6	4.72701554	36	15.77973360	5	4.61787178	56					
							14.62577911				
7	5.33346334	57	15.84734790	7 8	5.19492823	57	14.68384768				
	5 90084182	58	15.91281296	11 1	5.73173161	58	14.74003580				
9	6.43265153	59	15.97621063	9	6.23220356	59	1479441702				
10	693198790	60	1603761889	10	6.69977413	60	14.84706133				
11	7.40159821	61	1609711210	11	7*13745532	·61	-14.89803537				
12	7.84392921	62	16-15476111	12	7.54790311	62	14.94740253				
13	8.26116715	63	16.51063363	13	7 93346860	63	14.99522328				
14	8 65527158	64	16.26479426	14	8.29624050	64	15 04155525				
15	9.02800393	65	16.31730474	15	8.63808079	65	15 08645345				
16	9.38095204	66	16.36822402	16	8.96065468	66	1512997030				
17	9.71555102	67	16.41760854	17	9.26545597	67					
18.	1003310116	68	16.46551225	18	9.55382852	68	15.17215595				
				11 1			15.21305826				
19	10.33478341	69	16.51198683	19	9.82698462	69	15.25272302				
20	10.62167284	70	16.55708174	20	10.08602078	70	15.29119400				
21	10.89475019	71	16 60084440	21	10.33193114	71	15.32821310				
22	11.12491199	72	16.64332019	22	10.26561923	72	15'36472039				
23	11.40297948	73	16.68455267	23	10.78790801	73	15.39985427				
24	11 63970635	74	16.72458362	24	10 99954876	74	15.43395155				
25	11.86578550	75	1676345312	25	11.50155863	75	15.46704749				
2 6	12.08185506	76	16.80119964	26	11.39357731	76	15.49917590				
27	12.28850378	77	16.83786014	27	11.27717310		15.23036921				
28	12.48627562	78	16.87347017	28	1175254786	77	15.26062865				
			1607347017	4 I							
29	12.67567400	79	16 90806377	29	11 92019168	79	15.59007395				
30	12.85716552	80	16 94 167 377	30	1208055692	80	15.61864392				
31	13.03118321	81	16.97433175	31	12-23406172	81	15-64639615				
32	13.19812952	82	17.00606802	32	12.3810931ð	82	15-67335713				
33	13.35837908	83	17:03691178	33	12.22201028	83	1569955234				
34	13.51228085	84	17:06689115	34	12.65714627	84	15.72500630				
35	13.66016047	85	17.09603323	35	1278681102	85	15.74974261				
36	13.80232212	86	17.12436404	36	12'91129300	86	1577378395				
37	13.93905028	87	17.15190877	37	1303086114	87	15 79715221				
38	14.07061124	1 88 1	17.17869160	38	13.14576640	88	15.81986840				
39	14.19725458	89	17.20473589	39	13.25624328	89	15.84195282				
40	14.31921448	90	17.23006415	40	13.36221116	90	15.86342500				
1			17:25460800	ا . , ا	13.46477548	,					
41	14.43671083	91	17.25469809	41		91	15.88430376				
42	14.54995038	92	17.27865867	42	13.56322885	92	15.90460727				
43	14.65912762	93	17:30196614	43	13.65805203	93	15°92435306				
44	14.76442586	94	17:32464001	44	13.74941479	94	15 94355799				
45	14.86601767	95	17:34669914	45	13°83747680.	95	1596223840				
46	14 96406603	96	17.36816171	46	13 ⁻⁹²² 38834	96	15°98040993				
47	1505872477	97	17:38904537	47	14.00429096	97	15 99808799				
48	15.15013929	97 98	17:40936707	48	1408331813	98	16.01528701				
49	15.23844712	99	17:42914326	49	14.15959586	99	16.03202128				
50	15.32377836	100		50	14.53324305	100					
1	- 5 3-311-33	,1	-1 -1-3-3-4	,, ,	-7-33-13-7	, 0	H				

Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ peacent. with interest allowed to a Purchaser at the following rates per cent.

	College Willed Lindol Color all princes of a 2 and college and a 2												
Years	7 per cent.	Years	7 per cent.	Years	8 per cent.	Years	8 per cent.						
	0°93457943	51	12.51428263	I	0.02202202	51	11.12239472						
2	1.77359317	52	12.56684564	2	1.74268503	52	11.16389606						
3	2.53076674	53	12.61758098	3	2.46829983	53	11.50391760						
4	3.21731815	54	12.66656764	4	3.11703327	54	11'24252554						
	3.84250553	55	12.71388033	اخا	3.70032051	55	11.27978231						
5	4.41403720	56	12.75958971	5	4.22743658	56	11.31574684						
	4 9 3 8 3 8 3 0 6	57	12.80376268	7	4.70598357	57	11.35047483						
7 8	5.42101366	58	12.84646261	7 8	5.14222120	58	11.38401888						
9	5.86658598	59	12.88774960	9	5.24148972	59	11.41642884						
10	6.54608633	60	12.92768066	10	5.00811360	60	11.44775186						
	6.66.06.00	١.		II I	6.04.06.04	4.	******						
11	6.66196084	61	1296630993	11	6'24586384	61	11.47803265						
12	701817785	62	1300368882	12	6.55793062	62	11.20731327						
13	7.35033229	63	13'03986622	13	6.84705127	63	11.53563487						
14	7.66069114	64	13.07488865	14	7.11558793	64	11.56303474						
15	7 95124575	65	13.10880038	15	7*36558962	65	11.58954948						
16	8.22375261	66	13.14164324	16	7.59884259	66	11.61521357						
17	8.47976690	67	13 17345831	17	7.81691106	67	11.64005988						
18	8.72067060	68	13'20428300	18	802117073	68	11.66411963						
19	8 94769592	69	13.23415415	19	8.51583630	69	1168742262						
20	9.16194509	70	13.26310663	20	8.39298446	70	1170999722						
21	9.36440705	71	13.29117378	21	8.56257287	71	11.73187049						
22	9.55597165	72	13.31838740	22	8:72245621	72	11.75306824						
23	9.73744175	73	13.34477792	23	8.87339963	73	1177361513						
24	9.90954367	74	13.37037444	24	9.01609027	74	1179353469						
25	10.07293602	75	13.39520480	25	9.15114686	75	11.81284943						
26	10.5285142	76	13.41929566	26	9.27912805	76	11.83158084						
27	10.37593334	77	13.44267254	27	9.40053961	77	11.84974951						
28	10.21928128	78	13.46535993	28	9.21284042	78	11.86737515						
29			13.48738124	20			11.88447657						
30	10 ⁻⁶ 5061765 10 ⁻⁷ 7845904	79	13,20872896	30	9 ⁶²⁵⁴⁴⁷⁹⁸ 9 72974271	79	11.00102182						
31	10.00048915	81	13.52951469	31	9.82907220	81	11'91717830						
32	1101706064	82	13.24966910	32	9.92375458	82	1193281249						
33	11.12849852	83	13.56924208	33	10 01408162	83	11°94799035						
34	11.53210287	84	13.58825270	34	10.10032137	84	1196272711						
35	11.33712092	85	13 6067 1934	35	10.18272055	85	1197703747						
36	11.43489961	86	13.62465958	36	10.26120663	86	11 99093545						
37	11.52858698	87	13.64209042	37	10.33688966	87	12.00443460						
38	11.61843418	88	13.65902812	38	10.40906394	88	12.01754788						
39	11.70464682	89	1367548840	39	10.47820941	89	12.03028779						
40	11.78741634	90	13.69148633	40	10.54449304	90	12.04266633						
41	11.86692119	91	13.70703646	41	10.60806990	91	1205469502						
42	11.94332795	92	13.72215276	42	10.66908423	92	12.06638498						
43	1201679228	93	13.73684876	43	10.22767041	93	1207774693						
44	1208745980	94	13.75113742	44	10.78395373	93	1208879114						
45	12.15546689		1376503129	11	10.83805117	1 - 1	12009952754						
46		95		45	10.8000777	95							
	12:22094142	96	13.77854242	11 .	10.89007209	96	12.10996566						
47	12.28400338	97	13.79168249	47	10.94011882	97	12.12011474						
48	12.34476553	98	13.80446269	48	10.98828724	98	12.12998363						
49	12.403333390	99	13.81689391	49	11.03466728	99	12.13958090						
50	12.45980826	100	13.82898660	50	11.07934332	100	12.14891480						

TABLE VI.

Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	9 per cent,	Years	9 per cent.	Years	10 per cent.	Years	10 per cent.
1	091743119	51	10.00013879	1	0.90909091	51	909846119
2	1.71283569	52	1004273551	2	1 68399168	52	9.12621397
3	2.40884238	53	10.07511052	3	2.35218202	53	9.15294155
4	3 0 2 2 8 1 1 2 4	54	10.10631994	4	2.93411838	54	9.17869196
	3.56828262	55	10.13641658		3.44534304	55	9.20351043
5	4.05597290	36	10.16242022	5 6	3.89787610	56	9.22743946
			10.19346782		4.30112982		9.25051913
7 8	4.49447434	57		7 8		57	
	4.89075650	58	10.22021367	11 1	4.66271450		9.27278719
9	5.25053203	59	10.24662965	9	4 98860379	59	9.29427928
10	5 ·57852 <u>7</u> 84	60	10-27185534	10	5.28377119	60	9.31502904
11	5·8 7868893	61	10.39633831	11	5.55228724	61	9.33506828
12	6.15433369	62	10-31978370	12	5.79753409	62	9:35442706
13	6.40827350	63	10.34252544	13	602234515	63	9.37313387
14	6.64290610	64	10.36457529	14	6.52911504	64	9.39121567
15	6.86028889	65	10.38587353	15	6.41986744	65	9.40869805
16	7:06219734	66	10:40647883	16	6·59635008	66	9:42560522
17	7.25017160	67	10:42641852	17	6.76005594	67	9:44196023
18	7.42555433	68	10.44571853	18	6.91227928	68	9.45778493
19	7.58952134	69	10.48440355	19	7.05414546	69	9.47310013
20	7-74310672	7Ó	10.48249710	2ó	778663769	70	9.48792557
21	7:6 8722361	71	10.20002126	21	7:31061876	71	9.50228010
22	802268134	72	10.51699826	22	7.42684892	72	9.21618161
23	8.12019983	73	10.53344755	23	7.53600071	73	9.52964717
24	8.27042159	74	10.24038886	24	7.63867128	74	9.54269306
25	8.38392185		10.56484070	25			
26		75		26	7:73539259	75	9.55533480
	8:49121714	76	10.57982079		7.82664013	76	9.56758721
27	8.59277262	77	10.59434604	27	7.91284025	77	9.57946443
28	8 68900829	78	10.60843265	28	7.99437627	78	9.59098000
29	878030436	79	10.62209606	29	8-07159385	79	9.60214680
30	8.86700585	80	10-63535108	30	8-14480547	80	961297720
31	8 94942660	18	10.64821190	31	8.21429435	81	962348304
32	902785264	82	10.66069210	32	8.28031776	82	9.63367560
33	9.10254530	83	10.67280467	33	8.34310994	83	9.64356574
34	9'17374377	84	10.68456211	34	8.40288466	84	9.65316382
35	9:24166739	85	10.69597637	35	8.45983736	85	9*66247981
36	9:30651770	86	1070705892	36	8.51414709	86	9.67152323
37	9.36848020	87	10071782081	37	8.56597823	87	9.68030325
38	9.42772592	88	10.72827258	38	861548190	88	9.68882864
39	9.48441278	89	10.73842443	39	8 66279732	80	9.69710783
40	9.53868687	9ó	10.74828609	10	8.70805296	90	970514892
/				1 1		1 1	
41	9.59068349	91	10.75786696	41	875136753	91	9.71295968
42	964052816	92	10.76717607	42	879285089	92	9.72054759
43	9.68833750	93	1977622210	43	8.83260492	93	9.72791985
44	973421995	94	1078501340	44	8.87072415	94	9.73508335
45	9.77827655	95	10 79355801	45	8 90729647	95	9.74204476
46	9.82060150	96	10.80186368	46	8 94240367	96	9.74881046
47	9.86128277	97	10.80993787	47	8.97612199	97	9.75538664
48	9 90040256	98	10.81778775	48	9.00852257	98	9.76177919
49	9 93803786	99	10.82542025	49	9 03967185		9.76799386
50	9.97426073	100		50	9.06963199	99	
5 U	7 7/4200/3	TOO	1 1003204205	11 20	1 3 00303133	TOO	я 9 //403015 я 2

Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	11 per cent.	Years	11 per cent.	Yearn	12 per cent.	Years	12 per cent.
1	0.00000000	51	8.33967875	,	0.89285714	51	7:69771412
2	1.65610305	52	8.36298969	2	1.62912309	52	7 71757006
3	2.39813291	53	8.38542820	3	2.24649855	-53	7.73667489
4	2.85048187	54	8.44703602	4	2.77148130	54	7.75506492
	3.33059270	55	8.42785217		3.22323971	55	7.77277425
5	3.75164175	56	8.44791337	5	3.61598302	56	7.78983487
7	4.15378906	57	8.46725416	7	3.96046772		7.80627686
á l		58	8.48590709	8	4.26498623	57	7.82212853
- 1	4.45499098			u - I			
9 10	4.75156694	59	8.50390280	9	4.53603424	59	7.83741652
,	501859986	60	8 52127024	10	4.77877239	60	7.85216596
11	5.26022447	61	8·53803672	11	4.99735251	61	7.86640055
12	5.47983858	62	8.55422804	12	5.19515261	62	7.88014266
13	5.68026027	63	8.56986861	13	5.37494917	63	7:89341345
14	5.86384647	64	8.58498154	14	5.53904536	64	7.90623291
15	603258357	65	8.59958871	15	5.68936771	65	7.91861996
16	6.18815754	66	8-61371084	16	5.82754017	66	7.93059253
17	6.33200865	67	8.62736761	17	5.05494123	67	7.94216761
8	6.46537454	68	8.64057768	i 8	6.07274860	68	
		69		11 1		69	7.95336132
19	6.58932490		8.655335879	19	6.18197451	1 - 1	7 964 18894
20	6.70478881	70	8.66572777	20	6 28349382	70	7.97466501
21	6.81257721	71	8.67770067	21	6.37806650	71	7.98480334
22	6.91340107	72	8.68929273	. 22	6.46635594	72	7.99461705
23.	700788635	73	8.70051846	23	6.54894381	73	800411864
24	7:09658637	74	8.71139169	24	6.62634227	74	8-01332000
25	7.17999202	75	8.72192561	25	6.69900406	75	802223246
26	7.25854031	76	8.73213279	26	6.76733087	76	8.03086684
27	7.33262161	77	8.74202524	27	6.83168034	77	803923342
28	7.40258571	78	8.75161441	28	6.89237197	78	8.04734206
29	7.46874693	79	8.76091124	29	6.94969202	79	805520213
30	7.53138853	80	8.76992620	30	7:00389777	80	806282260
	7 33130033	1 1			7 00309///	1 1	
31	7·59076645	81	8·77866929	31	705522110	81	807021206
32	7:64711254	82	8.78715007	32	7.10387.149	82	807737868
33	7:70063731	83	8.79537771	33	7.15003875	83	808433032
34	7.75153234	84	8.80336097	34	7.19389522	84	8-09107447
	7.79997238	85	8.81110826	35	7.23559775	85	8 09761834
35 36	7.84611714	86	8.81862761	36	7.27528941	86	8.10396878
37	7.89011288	87	8.82592677	37	7:31310096	87	8.11013243
38	7.93209380	88	8.83301313	38	7:34915215	88	8-11611558
39	7.97218325	89	8.83989380	39	7.38355288	89	8-12192431
40	801049483	90	8.84657558	10	7.41640416	90	8-12756445
	0		0.06			_	
41	8.04713332	91	8.85306504	41	7.44779900	91	8-13304158
42	8.08219549	92	8.85936847	42	7.47782320	92	8-13836107
43	8.11577094	93	8.86549190	43	7.50655605	93	8-14352808
44	8.14794264	94	8.87144116	44	7.53407087	94	8-14854756
45	8-17878761	95	8.87722184	45	7.56943564	95	8.15342428
46	8.20837743	96	8.88283930	46	7.58571344	96	8.12816280
47	8.23677869	97	8·8882987 3	47	7:60996289	97	8·16276756
48	8.26405345	98	8.89360510	48	7.63323853	98	8.16724278
49	8.29025959	99	8.89876322	49	7.65559121	99	8-17159255
80	8.31545117	100	8.90377770	50	7.67706830	100	8-17582079

TABLE VI.

Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	13 per cent.	Years	13 per cent.	Years	14 per cent.	Years	14 per cent.
	0.89285714	51	7:14751858	1	0.87719298	51	6-67072712
2	1.60300811	52	7.16463438	2	1.57771718	52	6.68513321
3	2.19713983	53	7.18109678	3	2.14990345	53	669996575
4	2.69674161	54	7.19693773	4	262592714	54	671375310
	3.15520111		7.21218722		302803787	55	672702181
5	3.48979271	55 56	7-22687337	5	3.37211296	56	6.73979679
7	3.80959014	57	7:24102259		366978632	57	675210140
8	409052586	58	7.25465972	7 8	3'92977731	58	6.76395761
9	4.33920635	59	7.26780812	9	4.12824963	59	6.77538607
1ó	4.26082113	60	7.28048982	10	4.36188343	60	6.78640620
1 1	4.75950335	61	7.29272555	111	4.24326643	61	6-79703634
12	4.93858555	62	7:30453489	12	470616744	62	6.80729375
13	5.10078459	63	7.31593635	13	4.85323170	63	6.81719472
14	5.24833756	64	7:32694738	14	4 [.] 98662276	64	6.82675466
15	5.38310318	65	7.33758453	15	5.10812741	65	6.83598812
16	5.50663860	66	7:34786342	16	5.21923423	66	6.84490887
17	5.62025816	67	7:35779889	17	5.32119335	67	6.85352994
18	5.72507894	68	7:36740498	18	5.41506235	68	6.86186369
19	5.82205647	69	7:37669501	19	5.20174194	69	6.86992183
20	5.91201286	70	7:38568164	20	5.200406	70	6.87771547
21	5.99565936	71	7:39437689	21	5.6565140 5	71	6.88525517
22	6.07361442	72	7.40279217	22	5.72584846	72	6.89255095
23	6.14641833	73	7:41093834	23	5.79050940	73	6.89961233
24	6.51454553	74	7.41882575	24	5.85093616	74	6.90644838
25	6.27841292	75	7.42646424	25	5.30751475	75	6.91306773
26	6.33839098	76	7:43386318	26	5.36028222	76	691947861
27	6.39480753	77	7:44103153	27	601045078	77	6 92 5 6 8 8 8 4
28	6.44795493	78	7.44797781	28	6 057 37793	78	693170589
29	6:49809447	79	7:45471016	29	6.10160633	79	693753689
30	6.54546042	80	7.46123635	30	6.14334988	80	6.94318864
31	6.59026344	18	7.46756382	31	6.18280059	18	6-94866763
32	6.63269347	82	7.47369966	32	6.22013123	82	6.95398908
33	6.67292223	83	7.47965065	33	6.25549773	83	6.95913190
34	6.71110534	84	7.48542330	34	6.28904116	84	6.96412878
35	6.74738418	86	7.49102382	35	6.32088948	85	6.96897616
36	6.78188747		7:49645816	36	6.35115901		6.97367921
37	6.81473268	87	7.50173202	37	6.37995575	87	6.97824294
38	6.84692720	(7.50685088	38	6.40737646		6.98267210
39	6·87586943 6·90434968	89	7·51181998 7·51664434	39 40	6·43350970 6·45843663	89	6·98697128 6·99114485
FO	0 90434900			10	0 45043003		0 99114405
41	6.05754002	91	7·52132878 7·52587795	41 42	6·48223181 6·50496382	91	6.00013183
42	6·95754992 6·98241700	1 - 1	7 5 3 5 6 7 7 9 5 7 5 3 6 2 9 6 2 9	11 ' 1	6.21669288		6.99913183
43	7.00621748	93	7:53458807	43	6.54748634	93	700295316
14	7 02901173	94	7:53875740	44	6.26738917	94	700666474
15	7-05085573	95	7.54280823	45		95	701027014
6	707180142	4 - 1		46	6.58645434	1 - 1	7.01377280
17	7:09189711	97	7:54674436	47	6.60472816	97	701717603
8	7 09109/11	1 - 1	7.55056844	48	6.62225369	98	7.02048300
19	7-11118774	99	7.55428699	49	6.63907094	100	7.02369678
0	7.12971520	ITON	7.55790040	50	6.65521717		702682032 1

Present Value of £1 per Annum in n years; Redemption of Capital being at 24 per cent. with interest allowed to a Purchaser at the following rates per cent.

	-	1 1		4 1		1 1	
Years	15 per cent.	Years	15 per cent.	Years	16 per cent.	Years	16 per cent.
1	0.86956521	51	6.25356862	1	0.86206896	51	5.88551396
2	1.55321189	52	6.26666685	2	1.52945619	52	5.89711434
3	2.10465539	53	6.27925764	3	206127270	53	5.00826261
Ă	2.55873658	54	6.29136630	4	2.49489869	54	5.01808140
7 1	2 9 3 9 0 4 2 5 5	55	6.3030162		2.85512909		5.02020225
5 6	3.56511089	56	6.31423048	5 6	3.12002889	55	5.03021477
	3.53988028	57	6.32202003	7	3.41885684		5 94876774
7 8	378118515	58	6.33543170	7 8	3.64342067	57	5.95796866
9	3 99270310	59	6.34545687	9	3.83940698	59	5.96683399
1ó	4.17957523	60	6.35213183	10	4.01189206	60	5.97537919
11	4.34582406	61	6.36444285	1,	4.16482797	61	5.98361885
12	4.49464206	62	6.37343529	12	4.30131342	62	5.99156666
13	4.62859525	63	6.38211361	13	4.42383388	63	5.99923558
14	474976967	64	6.39049148	14	4.53439629	64	6.00663781
15	4.85987862	65	6.39858183	15	4.63464070	65	601378488
16	4.96034235	66	6.40639684	16	4.72592051	66	6.02068770
17	5 05234814	67	6.41394809	17	4.80936241	67	602735657
18	5.13689622	68	6.42124651	18	4.88591199	68	603380126
19	5 ·21483517	69	6.42830248	19	4.95636871	69	6.04003101
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22	5:41575078	72	6.44811157	22	5.13751573	72	6.05751617
23	5.47356226	73	6.45429125	23	5.18951114	73	606296954
24	5.52752424	74	6.46027296	24	5.23799291	74	606824760
25	5.57799394	75	6 46606433	25	5.28329222	75	607335715
26	5.62528577	76	6.47167261	26	5.32569993	76	6.07830463
27	5 ·66967759	77	6.47710472	27	5.36547260	77	6.08309621
28	571141589	78	6.48236726	28	5.40283738	78	6.08773774
29	575072003	79	6.48746651	29	5.43799610	79	609223482
30	5.78778594	80	6.49240847	30	5.47112872	80	6 0 9 6 5 9 2 7 7
31	5.82278915	81	6.49719888	31	5.50239622	18	6.10081668
32	5.85588735	82	6.20184319	32	5.23194300	82	6.10491143
33	5.88722265	83	6.20634665	33	5.25989902	83	6.10888164
34	5.91692341	84	6.21071426	34	5.28638120	84	6.11273176
35	5 945 1059 1	85	6.21495079	33	5 61 149650	85	6.11646604
36	5.97187569	86	6.21906082	36	5.63534018	86	6-12008853
37	5.99732882	87	6.52304875	37	5·6579999 6	87	6.12360313
38	602155290	88	6.2691877	38	5 [.] 67955546	88	6.12701357
39	604462797	89	6.23067490	39	5:70007938	89	6.13032341
•0	6.06662735	90	6.23432100	40	571963821	90	6.13353606
41	6.08761828	91	6.53786078	41	5.73829291	91	6.13665483
42	6.10766258	92	6.54129778	42	5.75609944	92	6 1 3968284
43	6.12681716	93	6.24463241	43	5.77310930	93	6.14262313
44	6.14513450	94	6.54787696	44	5.78936993	94	6.14547860
45	6.16266310	95	6.55102555	45	5.80492513	95	6.14825199
46	6.17944783	96	6.55408422	46	5.81981537	96	6.12094604
47	6.19553023	97	6.25705587	47	5.83407816	97	6.15356329
48	6.21094890	98	6.55994329	48	5 ⁻⁸ 4774824	98	6.12610622
49	6.22573967	99	6.26274918	49	5.86085791	99	6.15857720
50	6.23993588	100	6.26242611	50	5 ^{.8} 7343717	100	6.16097823

Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

1 0*85470085 51 5:55837503 11 0*84745762 51 5:265688 22 1:4840610 52 5:2749723 3 2*01964237 53 5:57865069 3 1*97966031 53 5:283890 4 2*43416865 54 5:8821602 4 2*3762490 54 5:292618 5 2*77587430 55 5:59740570 5 2*70090069 55 5:3007031 6 3*00231845 56 5*00624768 6 2*97132695 56 5:3086323 7 3*30583059 7 5*0475878 7 3*20004680 75 5:3085024 9 3*059740504 59 550385049 9 3*0594109 59 550385049 9 3*05961039 59 5:33350874 10 3*85715024 60 5*03845984 10 3*8458709 61 5*340808 12 4*12393026 62 5*05287112 12 3*9059796 62 5*3304181 13 4*2342163 63 5*05969702 11 4*04235597 65 5*07264426 15 4*24148548 65 5*336821 14 4*33770744 64 5*06628461 14 4*15737277 64 5*3081331 14 4*2393597 65 5*07264426 15 4*24148548 65 5*336817 4*38374345 69 5*038471832 17 4*38733482 67 5*308132 17 4*58867633 67 5*0849132 17 4*38733482 67 5*308132 19 4*72231345 69 5*0599137 19 4*2231345 69 5*0599137 19 4*2231345 69 5*0599137 19 4*2933517 68 5*0545071 19 4*72231345 69 5*0599137 19 4*293348726 73 5*70134799 20 4*56314443 20 5*3398271 21 4*83588629 71 3*70652811 21 4*61281576 71 5*398632 22 4*88647244 72 5*71153878 22 4*6582046 72 5*4029473 22 4*894726 73 5*7153878 22 4*6582046 72 5*4029473 22 4*83588629 71 3*70652811 21 4*129547 74 5*11484348 59 5*7014799 20 4*56314443 20 5*3398271 22 4*88647244 72 5*71153878 22 4*6582046 72 5*4029473 22 5*50541067 76 5*73001676 26 4*81304331 76 5*1494765 22 5*50541067 76 5*73001676 26 4*81304331 76 5*4194765 22 5*50541067 76 5*73001676 26 4*81304331 76 5*4194765 22 5*50541067 76 5*73001676 26 4*81304331 76 5*4194765 22 5*50541067 76 5*73001676 26 4*81304331 76 5*4194765 22 5*50541067 76 5*73001676 26 4*81304331 76 5*419405 22 5*50541067 76 5*73001676 26 4*81304331 76 5*419405 22 5*50541067 76 5*73001676 26 4*81304331 76 5*419405 22 5*50541067 76 5*73001676 26 4*81304331 76 5*419405 22 5*50541067 76 5*73001676 26 4*81304331 76 5*419405 22 5*50541067 76 5*73001676 26 4*81304331 76 5*419405 22 5*50541067 76 5*73001676 26 4*81304331 76 5*419405 22 5*0541067 76 5*73001676 26 5*33471006 86 5*7673230 39 5*1167605 89 5*410540 9			1 1		11		1 1	
2 1 1-50641622 52 52-5872022 2 1148405610 52 52-749723 3 201964237 53 51-5860509 3 197966031 33 5283890 4 243416865 54 51-58821602 4 237632490 54 52924611 5 277587430 55 51-59740570 5 270090069 55 53007031 6 370521845 56 50624768 6 297132695 56 5308632 7 330583507 57 561475878 7 320004680 57 5316263 8 3151534197 58 5-62295478 8 339596229 58 53237101 9 3769744694 59 55085049 9 375051039 59 53306872 11 399830543 61 564579604 11 378445870 61 5344080 11 412930206 62 565287112 12 390659796 62 53354181 13 4123642163 63 5505969702 13 4706424315 63 53565334 14 433770744 64 556628461 14 415737277 64 53024331 15 442935597 65 557264436 15 42448548 65 5368130 18 465831101 68 550945077 18 445097094 68 5384072 18 476831101 68 550945077 18 445097094 68 5384072 20 478132311 70 570134709 20 4756334443 70 5330327 21 483588629 71 370652811 21 461281576 71 5308433 22 488647244 72 571153878 22 465882046 72 54029473 22 488647244 72 571153878 22 47588206 72 54029473 23 493348726 73 571638675 23 479153751 73 54072834 24 497728317 74 572107840 24 474129547 74 5141634 25 50924935 77 573427476 27 484550420 77 5423884 26 781575208 81 57506583 32 47968579 81 5435683 36 512593067 89 577625583 32 49086570 82 5445072 28 51258208 81 57506583 32 47968579 78 54450743 31 521542208 81 57506189 31 495680970 81 5435633 35 52347000 86 57673478 30 57034791 99 5430343 70 5445637448 31 52981631 84 57900102 82 57535583 32 47968579 81 54465212 35 57364907 89 577025558 37 570828272 88 573595090 88 577525558 37 570828272 89 574626631 80 57452641 92 574626631 80 57452649 99 5485200 99 57968504 49 52454791 99 5450562 89 574626631 80 57405229 93 57874067 44 57553116 93 54405212 95 57452641 92 57845309 42 57165625 89 5460946 49 574974062 96 579452776 45 521037710 96 54771522 44 574580122 99 577945800 41 57475320 99 5485200 99 5481223	Years	17 per cent.	Years	17 per cent.	Years	18 per cent.	Years	18 per cent.
2 1750641622 52 5758872052 2 1148405010 52 57274972 3 201964237 53 575866059 3 179766031 53 57283890 4 243416865 54 575821602 4 237632490 54 572924611 5 2777587430 55 5759740570 5 270090059 55 53007031 6 305231845 56 50624768 6 297132695 56 5308631 7 3730583507 57 561475878 7 320004680 57 5316263 8 3751534197 58 55295478 8 339596129 58 573375061 11 3795830543 61 564579694 11 378458709 61 57346801 11 3795830543 61 564579694 11 378458709 61 57346811 12 472393026 62 56287112 12 396059796 62 57346811 13 4723642163 63 5765969702 13 4706424315 63 57365334 14 473707044 64 576628461 14 4715737277 64 573623431 15 4742935597 65 56764436 15 472448548 65 573681301 16 4751265598 66 567878574 16 4731780815 66 573736281 17 475867633 67 56847182 17 473873482 67 573789032 20 478132311 70 570134799 20 475933700 69 57399317 19 472231345 69 57959317 19 475933700 69 57399317 19 475933700 69 57399317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 475933700 69 573959317 19 47593700 69 573959317 19 47593700 69 573959317 19 47593700 69 573959317 19 47593793 60 575959317 19 475937381 79 57034579 20 475937381 79 57034579 20 475937381 79 57034579 20 475937381 79 57034579 20 475953781 79 574526631 80 47915371 73 54072834 79 57311 73 54072834 79 57311 73 54072834 79 57511 73 573950676 20 47593348 70 77572561981 25 47768306 75 574526031 80 47915371 73 54072834 70 57703458 77 57433965 29 4790457491 79 5439550 80 574626631 80 47915371 79 543950 80 574626631 80 573417182 80 574626631 80 573417193 80 574626631 80 57462664 90 57452668 90 574626631 80 57462664 90 57462664 90 57462664 90 57462664 90 57462664 90 57462664 90 574626	1		51		1		51	5.26568832
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4 243416865 54 5:58821602 4 2:37632490 54 5:302031 6 3706331845 56 5:590624768 6 2:70132695 56 5:308632 7 3:30583507 57 5:61475878 7 3:20004680 57 5:30632 8 3:51534197 58 5:62295478 8 3:30596299 58 5:33237109 9 3:69744694 59 5:63085049 9 3:56561039 59 5:330687. 11 3799830543 61 5:64579694 11 3:8458709 61 5:3340806 12 412303026 62 5:6287112 12 3:05059706 62 5:3504188 13 4123642163 63 5:65969702 13 4*06424315 63 5:3504188 15 442935597 65 5:76264426 15 424185548 65 5:362183 16 4:51265598 66 5:67878574 16 4:31780815 66 5:3736281 17 4:58867633 67 5:68471832 17 4:38735482 67 5:3789407 18 4:5831101 68 5:69045077 18 4:45097094 68 5:3840727 19 4:72231345 69 5:69599137 19 4:50936700 69 5:3390322 24 4:8388629 71 3:70652811 21 4:61281576 71 5:3984632 22 4:88647244 72 5:71153878 22 4:65882046 72 5:4029473 23 4:93348726 73 5:71538675 23 4:79153751 73 5:4072842 24 4:97728317 74 5:72107840 24 4:74129547 74 5:4114832 25 5:1816775 75 5:72561981 25 4:77838060 75 5:4114832 26 5:05641067 76 5:73301676 26 4:81304343 76 5:4194705 27 5:05240356 78 5:73839906 28 4:87595729 78 5:4259774 28 5:12589368 78 5:73839906 28 4:87595729 78 5:4259774 29 5:15752983 79 5:74626531 30 4:93151018 80 5:4340134 31 5:21542298 81 5:75001859 31 4:95689970 81 5:4300133 31 5:21542298 81 5:75001859 31 4:95689970 81 5:4300133 32 5:24496072 82 5:75365583 32 4:9065676 82 5:4406212 33 5:25503386 85 5:75365583 32 4:9065676 82 5:4406212 33 5:25503386 85 5:7501859 33 5:0021624 88 5:4436313 35 5:3333868 85 5:7501859 31 4:95689970 81 5:4356188 35 5:44684132 95 5:774626631 34 5:0429517 84 5:4468313 36 5:33471006 86 5:7702458 37 5:4256678 85 5:44067212 37 5:42688250 91 5:78184307 41 5:14753199 91 5:4658184 5:4456014 92 5:78453098 42 5:14165628 92 5:4406212 31 5:42688250 91 5:78184307 41 5:14753199 91 5:4658184 5:4456014 92 5:78453098 42 5:1416465 90 5:77907445 44 5:18859919 91 5:4568184 5:4456014 92 5:78453098 42 5:1416465 90 5:77907445 44 5:18859919 91 5:4658184 91 5:44580129 91 5:4658184 91 5:44580129 91 5:4658184 91 5:44580129 91 5:4658184 91 5:44580129 91 5:4658184	3				3	1 97966031		5.28389037
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42 5:44280611 92 5:78453098 42 5:16185628 92 5:4682201 43 5:45801229 93 5:78714087 43 5:17553116 93 5:4705522 44 5:47254411 94 5:78967532 44 5:18859591 94 5:4728166 45 5:48644132 95 5:79452776 46 5:21303710 96 5:4775016 46 5:51247600 97 5:79685043 47 5:22447791 97 5:479227 48 5:52467893 98 5:79910703 48 5:23453780 98 5:481243 40 5:53637863 99 5:80129968 49 5:24594334 99 5:483202	20	5.41019405	90	577997445	30	513251557	90	5'40334375
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44 5-47254411 94 5-78967532 44 5-18859591 94 5-4728166 45 5-48644132 95 5-79213683 45 5-20108674 95 5-475016 46 5-49974062 96 5-79452776 46 5-21303710 96 5-477152 47 5-51247600 97 5-79685043 47 5-22447791 97 5-479227 48 5-52467893 98 5-79910703 48 5-23453780 98 5-481243 49 5-53637863 99 5-80129968 49 5-24594334 99 5-483202	42		1 - 1			5.16185628		5.46822010
44 5-47254411 94 5-78967532 44 5-18859591 94 5-4728166 45 5-48644132 95 5-79213683 45 5-20108674 95 5-475016 46 5-49974062 96 5-79452776 46 5-21303710 96 5-477152 47 5-51247600 97 5-79685043 47 5-22447791 97 5-479227 48 5-52467893 98 5-79910703 48 5-23453780 98 5-481243 49 5-53637863 99 5-80129968 49 5-24594334 99 5-483202	43	5.45801229	93		43		93	5.47055230
45 5-48644132 95 5-79213683 45 5-20108674 95 5-475016- 46 5-49974062 96 5-79452776 46 5-21303710 96 5-4771526 47 5-51247600 97 5-7965643 47 5-22447791 97 5-479227 48 5-52467893 98 5-79910703 48 5-23453780 98 5-4812436 49 5-53637863 99 5-80129968 49 5-24594334 99 5-4832026			94	578967532	44	5-18859591	94	5.47281699
46 5.49974062 96 5.79452776 46 5.21303710 96 5.4771526 47 5.51247600 97 5.79685043 47 5.22447791 97 5.4792277 48 5.52467893 98 5.79910703 48 5.23453780 98 5.4812433 40 5.53637863 99 5.80129968 49 5.24594334 99 5.4832026			95	5°79213683	45	5°20108674	95	5.47501639
47 5.51247600 97 5.79685043 47 5.22447791 97 5.479227 48 5.52467893 98 5.79910703 48 5.23453780 98 5.481243 40 5.53637863 99 5.80129968 49 5.24594334 99 5.483202	46	5.49974062		579452776			96	5.47715263
48 5.52467893 98 5.79910703 48 5.23453780 98 5.481243 40 5.53637863 99 5.80129968 49 5.24594334 99 5.483202		5.51247600		579685043	47			5.47922779
49 5.53637863 99 5.80129968 49 5.24594334 99 5.483202	48	5.52467893						5.48124383
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BU 14/0044 BUN 500343043 BU 3 43001340 BUN 5 405100	80	5.54760224	100	5.80343043	50	5.52601950	100	5.48510611

Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	19 per cent.	Years	19 per cent.	Years	20 per cent.	Years	20 per cent.
1	0.84033613	51	500228366	1	0.83333333	51	4.76397606
2	1.46235783	52	5.01099110	2	1.44128114	52	477157371
3	1.94123054	53	501870737	3	1 90426438	53	4.77886988
4	2.32116644	54	5.02643943	4	2.26851054	54	4.78588007
3	2.62987050	55	5.03387310		2.26248058	55	4.79261876
5	2.88558674	56	504102319	5	2.80465596	56	4.79909947
7	3.10081914	57	5 04790356	7	300756014	57	4.80533489
8 I	3.28442447	58	5.05452722	8	3 17998041	58	4.81133689
9	3.44285171	59	5.06090635	9	3.32826450	59	4.81711659
16	3.58090822	60	5.06705241	1ó	3.45711220	40	4.82268446
11	370225083	61	507297617	11	3.57007761	61	4.82805033
12	3.80971064	62	5.07868777	12	3.66989814	62	4.83322344
13	3.90551358	63	5.08419676	13	375871640	63	4.83821251
14	3.99143399	64	508951213	14	3.83823343	64	4.84302575
15	4.06890353	65	509464238	15	3.90981685	65	4.84767089
16	4.13909017	66	509959553	16	3.97457878	66	4.85215524
17	4.20295622	67	5.10437917	17	403343280	67	4.85648572
18	4.26130164	68	5.10000046	18	408713643	68	4.86066886
19	4.31479697	69	5.11346618	19	4.13632303	69	4.86471084
20	4.36400842	7ó	5-11778278	20	4.18152627	70	4.86861751
21	4.40941746	71	5.12195635	21	4.22319899	71	4.87239443
22	4.45143605.	72	5·12599267	22	4.26172795	72	4.87604686
23	4.49041879	73	5·12989722	23	4'29744549	73	4 ^{.8} 7957979
24	4.52667255	74	5.13367523	24	4.33063872	74	4.88299797
25	4.56046426	75	5.13733165	25	4.36155701	75	4.88630591
26	4.59202716	76	5.14087120	26	4.39041798	76	4.88950789
27	4.62156602	77	5.14429835	27	4.41741239	77	4.89260800
28	4.64926129	78	5.14761740	28	4.44270818	78	4.89561012
29	4.67527266	79	5.15083240	29	4.46645377	79	4.89851795
30	4.69974193	80	5.15394724	30	4.48878082	80	490133502
31	4.72279546	81	5·15696563	31	4.50980653	81	4 90406470
32	4.74454623	82	5.12989109	32	4.52963557	82	4 9067 1018
33	476509552	83	5·16272699	33 -	4.54836174	83	490927455
34	4.78453445	84	5.16547658	34	4.56606930	84	491176073
35	4.80294519	85	5.16814292	35	4.58283418	85	491417151
36	4.82040202	86	5.17072896	36	4.59872499	86	491650957
37	4.83697229	87	5.17323753	37 .	4.61380387	87	4.91877748
38	4.85271717	88	5.17567132	38	462812725	88	4.92097769
39	4.86769239	89	5.17803291	39	4.64174645	89	4'92311253
40	4.88194879	90	5.18032480	40	4.65470831	90	492518425
41	4.89553287	91	5.18254934	41	4 66705562	91	4 927 19502
42	4.90848723	92	5.18470881	42	4.67882757	92	4.92914689
43	4.92085099	93	5.18680240	43	4.69006012	93	4.93104186
44	4.93266011	94	5.18884121	44	4.70078630	94	493288180
45	4.94394773	95	5.19081824	45	471103655	95	4 93466856
46	4.95474444	96	5.19273842	46	4.72083893	.96	4.93640388
47	4.96507848	97	5.19460363	47	4.73021938	97	4.93808945
48	4.97497602	98	5.19641262	48	473920187	98	4.93972688
49	4.98446133	99	5.19817613	49	4*74780864	99	4'94131773
50	4.99355689	100	5.19988681	50	475606031	100	4 94286350

TABLE VI.

Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	21 per cent.	Years	21 per cent.	Years	22 per cent.	Years	22 per cent.
1	0.82644628	51	4.24734179	1	0.81967213	51	4:34955276
2	1.42080377	52	4.55426366	2	1.40089934	52	4.35588517
3	1.86867977	53	4.26090993	3	1.83440070	53	4.36196465
4	2.21819065	54	4.56729482	4	2.17005470	54	4.36780432
	2.49845807	55	4.57343162		2.43755674	55	
5 6	2.72814099	56	4.57933274	5	2 65569002	56	4·37341641 4·37881235
7	2.91974699	57	4.58500982		2.83691621	57	4.38400286
8	3.08197424	58	4.59047373	7 8	2.98982849	58	4.38899793
9	3.55102013	59	4.59573469	9	3.13024422	59	4.39380698
10	3.34128970	60	4.60080228	10	3.53323815	60	4.39843881
11	3.44701644	61	4.60568552	11	3.33215646	61	4:40290171
12	3.53998432	62	4.61039286	12	3.41895389	62	4.40720346
13	3.62255484	63	4.61493228	13	3.49591346	63	4.41135140
14	3.69635856	64	4.61931131	14	3.56459823	64	4.41535243
15	3.76270210	65	4.62353703	15	3.62625685	65	4.41921308
16	3.82264475	66	4.62761612	16	3.68189884	66	4.42293946
17	3.87705442	67	4.63155492	17	3.73234921	67	4.42653741
18	3.92664893	68	4.63535939	18	3.7782888o	68	4.43001240
19	3.97202716	69	4.63903519	19	3.82028442	69	4.43336962
2 0	401369265	70	4.64258768	20	3.85881181	70	4.43661398
21	405207193	71	4.64602192	21	3.89427318	71	4.43975015
22	4.08752860	72	4.64934273	22	3'92701091	72	4.44278254
23	4 12037463	73	4.65255467	23	3.95731829	73	4.44571534
24	4.15087914	74	4.65566209	24	3.98544801	74	4.44855251
25	4.17927553	75	4.65866909	25	401161892	75	4.45129785
26	4.20576722	76	4.66157959	26	4.03602155	76	4.45395494
27	4.23053233	77	4.66439732	27	4.05882253	77	4.45652719
28	4.25372748	78	4 667 12 584	28	4.08016825	78	4.45501786
29	4.27549094	79	4.66976850	29	4.10018220	79	4.46143005
30	4.59594555	80	4.67232855	30	4.11899246	80	4.46376670
31	4.31519938	81	4.67480904	31	4.13669284	81	4.46603063
32	4.33335058	82	4.67721290	32	4.15337048	82	4.46822453
33	4.35048590	83	4.67954294	33	4.16910939	83	4.47035095
34	4.36668350	84	4.68180182	34	4.18398224	84	4.47241234
35	4.38201375	85	4.68399210	35	4.19805443	85	4.47441104
36	4.39654020	86	4.68611622	36	4.21138496	86	4.47634929
37	4.41032034	87	4.68817651	37	4.22402721	87	4.47822922
38	4.42340637	88	4.69017521	38	4.23602957	88	4.48005288
39	4.43584574	89	4.69211445	39	4.54743603	89	4.48182222
10	4.44768170	90	4.69399629	40	4.25828667	90	4.48353913
41	4.45895377	91	4.69582268	41	4.26861806	91	4.48520539
42	4.46969811	92	4.69759551	42	4.27846369	92	4.48682273
43	4.47994787	93	4.69931659	43	4.28785423	93	4.48839280
44	4.48973352	94	4.70098764	44	4.29681785	94	4.48991719
45	4.49908310	95	4.70261033	45	4.30538045	95	4.49139741
46	4.50892245	96	4.70418625	46	4.31356593	36	4.49283493
	4.51657545	97	4.70571694	47	4.35139635	97	4.49423114
47	4.52476416	98	4.70720387	48	4.35889501	98	4.49558740
48 19	4.53260904	99	4.70864845	49	4.33607185	99	4.496502CO

Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	23 per cent.	Years	23 per cent.	Years	24 per cent.	Years	24 per cent.
1	0.81300813	51	4.16825242	I	0.80645161	51	4.00146141
2	1.38154528	52	4.17406758	2	1.36271871	52	4 00682019
3	1.80135660	53	4.17964980	3	1.76948192	53	4.01196377
4	2.12396353	54	4.18501122	4	207978956	54	401690336
	2.37955377	55	4.19016313		2.32424706	55	4.02164945
5 .	2.58698765	56	4.19511609	5 6	2.52175028	56	4.02621183
	2.75865547	57	4.19988000		2.68459670	57	4.03059965
7 8	2.90303279	58	4.50446409	7 8	2.82113434	58	4 0 3 4 8 2 1 4 7
9	3.02611333	59	4.20887705	9	2.93722944	59	403888533
10	3.13225545	60	4.51315200	10	303712494	60	404279875
11	3.22470427	61	4.21722159	11	3·12396562	61	404656881
12	3:30592581	62	4.22116800	12	3.50013185	62	405020216
13	3.37782753	63	4.22497300	13	3·2674584 2	63	405370505
14	3.44190804	64	4.22864295	14	3.32738259	64	405708338
15	3.49936103	65	4.23218385	15	3:38104602	65	4.06034269
16	3.55114912	66	4.23560138	16	3.42936718	66	4 06348822
17	3.29802712	67	4.23890088	17	3.47309327	67	406652492
18	3.64073145	68	4.24208740	18	3.51283843	68	406945746
19	3.67970907	69	4.24516573	19	3.24911207	69	407229026
20	3.71543997	70	4.54814039	20	3.58234027	70	4.07502750
21	3.74830398	71	4.25101568	21	3.61288217	71	4.07767315
22	3.77862394	72	4.25379565	22	3.64104263	72	408023097
23	3.80667601	73	4.25648417	23	3 [.] 66708207	73	4.08270450
24	3.83269783	74	4.25908489	24	3.69122435	74	4.08509713
25	3.85689499	75	4.26160128	25	3.71366291	75	408741208
26	3·87944626	76	4.26403667	26	3 7 3 4 5 6 5 7 9	76	408965239
27	3.90050784	77	4.26639417	27	375407967	77	409182096
28	3.92021680	78	4.26867680	28	3.77233317	78	409392056
29	3.93869394	79	4.27088739	29	3.78943951	79	409595382
30	3.95604610	80	4·27302867	30	3.80549881	80	409792323
31	3.97236817	18	4.527510321	31	3.82059988	81	409983120
32	3.98774467	82	4.27711349	32	3.83482177	82	4.10167999
33	4.00225116	83	4.27906187	33	3.84823512	83	4.10347177
34	4.01595538	84	4.28095058	34	3.86090323	84	4.10520863
35	4.02891825	85	4.28278178	35	3.87288296	85	4.10689224
36	4.04119470	86	4.28455753	36	3.88422558	86	4.10852540
37	4.05283438	87	4.28627979	37	3.89497740	87	4.11010305
38	4.06388231	88	4.58795043	38	3 905 18038	88	4.11164513
39	4 0 7 4 3 7 9 3 7	89	4.58957127	39	3.91487261	89	4.11313539
40	408436279	90	4.59114401	20	3.92408877	90	4.11458139
41	4.09386654	91.	4.29267031	41	3.93286048	91	4.11598466
42	4.10292168	92	4.59415174	42	3.94121605	92	4.11734664
43	4.11155668	93	4.29558985	43	3.94918375	93	4.11866874
44	4.11979765	94	4.29698607	44	3.95678607	94	4.11992229
45	4.12766862	95	4.29834180	45	3 96404594	95	4.12119860
46	4.13219171	96	4.29965837	46	3.97098391	96	4.12240887
47	4.14238735	97	4.30093709	47	3.97761896	97	4.15358435
48	4.14927440	98	4.30217918	48	3 98 3 9 6 8 6 1	98	4.12472607
49	4.15587033	99	4.30338583	49	3°99004906	99	4.12283253
50	4.16219132	100	4.30455819	50	3.99387535	100	4.12691383

TABLE VI.

Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

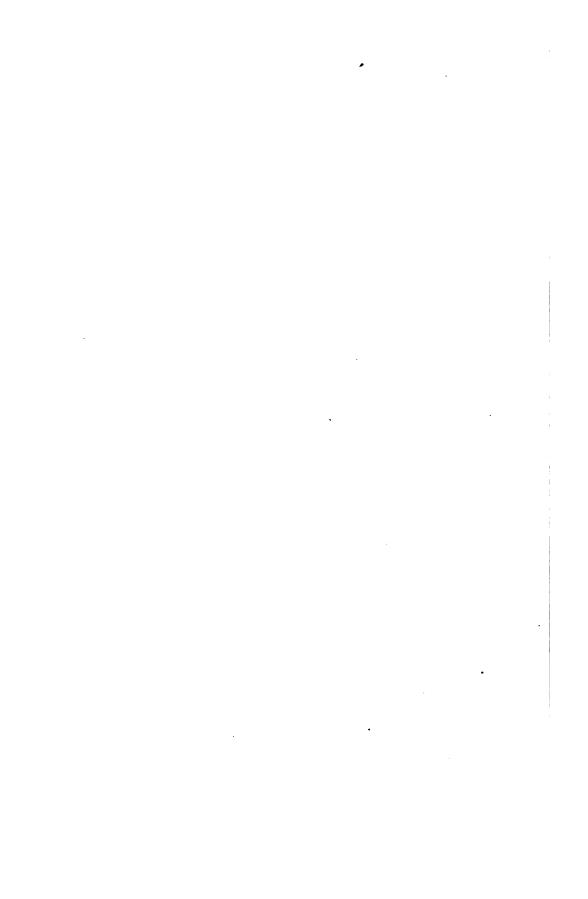
Years	25 per cent.	Years	25 per cent.	Years	25 per cent.	Years	25 per cent.
7	0.80000000	26	3.60011705	51	3.84750498	76	3.92897113
2	1°34459834	27	3.61824777	52	3.85245908	77	3 93097260
3	173871566	28	3.63520126	53	3.85721375	78	3.93291034
4	203741560	29	3.65108390	54	3.86177941	79	3°93478677
5	2.27145288	30	3.66598962	55	3.86616582	80	3.93660422
6	2.45972223	1 1		56	3.87038205	1 1	• • • • • • • • • • • • • • • • • • • •
7 8	261441032	31	3.68000173	57	3.87443662	81	3 93836489
8	274373003	32	3.69319435	58	3.87833748	82	3.94007089
9	2.85341801	33	370563363	59	3.88209208	83	3'94172423
10	2.94760256	34	3.71737883	60	3.88570742	84	3.94332683
·	• •	1 35	372848317	1.1		85	3.94488053
11	302933038	36	3.73899460	61	3.88919006	86	3.9463870 8
12	3.10089897	37	3.74895640	62	3.89254617	87	3.94784815
13	3.16407363	38	3.75840778	63	3·8 957·8156	88	3.94926535
14	3.22023311	39	3.76738431	64	3.89890168	89	3.95064021
15	3.27046993	40	377591838	65	3.90196170	90	3.95197420
16	3.31566099	1 1		66	3.90481646	1 1	
17	3.35651826	41	3.78403949	67	3.90762055	91	3.95326872
18	3.39362584	42	3.79177460	68	3.91032831	92	3.95452513
19	3.42746741	43	3.79914840	69	3.91294383	93	3.95574472
20	3.45844693	44	3.80618353	70	3.91547098	94	3.95692872
- 1		45	3.81290080			95	3.95807833
21	3.48690442	46	3.81931936	71	3.91791345	96	3.95919468
22	3.21312813	47	3.82545687	72	3.92027470	97	3.96027888
23	3.53736403	48	3.83132964	73	3.92255804	98	3 96 1 3 3 1 9 8
24	3.55982329	49	3.83695277	74	3.92476660	99	3.96235499
25	3.58068822	50	3.84234022	75	3.92690336	100	3.96334887

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TABLE VII.

FOR

VALUING MINERAL AND OTHER PROPERTIES.



Present Value of £1 per Annum in n years; Redemption of Capital being at 8 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	3½ per cent,	Years	8i per cent.	Years	4 per cent,	Years	4 per cent.
-	0.96618357	51	22.97064504	1	096153846	51	20:60418764
2	1.89533635	52	23.13894415	2	1.87754347	52	20.73949417
3	2.78916405	53	23.30203549	3	2.75080186	53	20.87041924
4	3.64927483	54	23.46008908		3.28388138		20.99711281
	4.47718618	55	23.61326887	4	4.37912472	54	21.11973855
5	5.27433115	56	23.76173297	5	5.13881312	56	21.53845412
7	6 04206411	57	23.00563402	7	5.86488408	57	21.35331174
8	6.77766575	58	24.04511909	8	6.55925283	58	21.46453285
9	7.49434980	59	24.18033027	9	7.22366639	59	21.24233203
20	8.18126362	50	24.31140457	10	7.85974980	60	21.67647661
11	8-84349638	61	24.43847430	11	8.46901774	61	2177743756
12	9.48208065	62	24 ·56166184	12	905287996	62	21.87520491
13	10:09799661	63	24.68110677	13	9.61265388	63	21.96989959
14	10.69212212	64	24:79691199	14	10.14957026	64	2206161265
15	11.56220008	65	24.30313800	15	10.66478051	65	22.15044847
16	,11.82781528	66	25 01813220	16	11-15936304	66	22.23650325
17	12.35291852	67	25.12365309	17	11.63432894	.67	22:31986976
18	12.86857266	68	25.22603339	81	12.09062710	68	22.40063727
19	13.36650354	69	25.32531718	19	12.2914897	69	22.47889185
20	13.84740292	70	25.42160131	20	12.95073284	70	22.55471628
21	14.31193037	71	25.51497955	21	13.35616766	71	22.62819046
22	14.76071520	72	25.60554353	22	13.74619672	72	2269939137
23	15.19435802	73	25.69337787	23	14.12152080	73	22.76839322
24	15.61343242 16.01848636	74	25.77857024	24	14.48280123	74	22.83526751
25 26	16.41004359	75	25.86120175	25 26	14.83066253	75	22.90008337
27	16.78860502	1 ' 1	25°94135060 26°01909611	11	15.16569501	1 ' 1	22'96290717
28	17.15464972	77 78	26.09451003	27	15.48845708	77 78	23 ⁰ 23 ⁸ 033 ⁵ 23 ⁰ 82 ⁸ 33 ⁸ 3
29	17.50863624	79	26.16766486	29	15·7994772 3 16·09925614	79	23.14002839
50	17.85100361	80	26.53863016	30	16.38826842	80	23.19553485
31	1878217230	81	26:30747306	31	16.66696423	81	23.24931890
32	18.50254524	82	26 ·37425864	32	16.93577090	82	23.30146439
33	18.81250859	83	26.43904992	33	17:19509430	83	23.35202337
34	19.11243262	84	26.50190777	34	17:44532010	84	23.40104596
35	19:40267262	85	26.26289133	35	17.68681516	85	23.44858081
36	19.68356922	86	26.62205768	36	17*91992846	86	23 [.] 4946747 5
37	19 95544970	87	26.67946207	37	18-14499229	87	23.53937302
38	20.31863803	88	26.73515815	38	18.36232312	88	23.58271948
39	20 .47340591	89	26.78919781	39	18.57222265	89	23 62475645
40	2072007314	90	26.84163123	40	18.77497850	90	23.66552478
41	20795890824	91	26.89250714	41	18-97086513	91	2370506411
42	21.19017899	92	26.94187258	42	19.16014453	92	23.74341259
43	21.41414275	93	26.98977326	43	19.34306678	93	23.78060727
44	21.63104719	94	27.03625348	44	19.51987094	94	23.81668396
45	21.84113056	95	27.08135596	45	19.69078547	95	23.85167716
46	22.04462203	96	27.12512225	,, ,	19.85602878		23.88562038
47	22.24174232	97	27·16759267 27·20880612	47 48	20.01.580989	97	2391854608
48	22.43270390 22.61771135	98	27.24880037	49	20.17032883	98	23 [.] 9504855 3 23 [.] 98146 906
49	2279696180	99 100	27.28761200	50	20.46433813	100	24 01152597
30 }	447/9090100	FAG	4/ 40/01200	11 90	2040433012	[200]	24 ULL 3239/

Present Value of £1 per Annum in n years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	41 per cent.	Years	4. per cent.	Years	5 per cent.	Years	5 per cent.
1	0.95693780	51	18:67977925	1	0795238095	51	1708413948
2	1.86008155	52	18.79092298	2	1.84294144	52	17'17705901
3	2.71348062	53	18:89833805	3	267715853	53	17.26677162
4	3.52079148	54	1900216439	4	3.45988383	54	17:35340328
5	4.28532423	55	19.10253575	5	4.19543034	55	17:43707409
6	501008279	56	19:19958003		4.88764524	56	17.51789855
7 8	5.69779941	57	1929341971	7 8	5'53997119	57	17.59598600
8	6.35006401	58	19:38417188	8	6.15549815	58	17.67144066
9	6 97 1 8 5 4 6 3	59	19.47194875	9	673700745	59	17.74436219
10	7.56255138	60	19.55685776	10	7.28700946	60	17.81484574
11	8.12496536	61	19-63900188	11	7.80777582	61	17.88298227
12	8.66085170	62	19°7 1847636	12	8:30136716	62	17 94885590
13	9.17182594	63	19:79538634	13	8.76965710	63	1801255856
14	965937760	64	19:86981216	14	9.21435302	64	18'07416122
15	10.13488337	65	19 94 184448	15	9.63701411	65	18-13374306
16	10:56961234	66	20.01160293	16	10.03906710	66	18.19137709
17	10099474645	67	20'07905977	17	10.42182010	67	18.24713336
18	11.40137805	68	20.14440026	18	10.78647467	68	18.30107896
19	11.79052288	69	20.20766255	19	11.13413643	69	18.35327828
20	12.16312587	70	20.26891783	20	11.46582453	70	18.40379299
21	12.52006709	71	20:32823464	21	1178247989	71	18-45268235
22	12.86216731	72	20.38567886	22	1208497261	72	18.50000324
23	13.19019289	73	20'44131386	23	12.37410850	73	18.54581022
24	13.20486020	74	20.49520057	24	12.65063492	74	18.59015572
25	13.80683963	75	20.54739776	25	1291524598	75	1863309018
26	14.09675925	76	20.29796172	26	13.16858723	76	18.67466190
27	14.37520811	77	20.64694710	27	13.41125985	77	18.71491754
28	14.64273912	78	20.69440614	28	13.64382432	78	1875390183
29	14.89987187	79	20.74038930	29	13.86680387	79	1879165781
30	15.14709511	80	2078494524	30	1408068755	80	18-82822692
31	15.38486893	81	20.82812079	31	14.28593290	81	18-86364899
32	15.61362686	82	50.86999115	32	14.48296853	82	18.89796241
33	15.83377779	83	20.01020080	33	14 67219631	83	18.93120415
34	16:04570757	84	20194980877	34	14.85399340	84	18 96 34 0 9 7 3
35 36	16.24978084	85	20 98 78 98 63	35	1502871425	85	18 99461351
30	16.44634209	86	21 02481840	36	15.19669211	86	1902484848
37	16.63571747	87	21 06060575	37	15.35824070	87	1905414642
38	16.81821528	88	21 09529711	38	15.51365556	88	1908253806
39	16.99412892	89	21.12892760	39	15.66321541	89	19.11005297
40	17.16373475	90	21.16123109	20	15.80718325	90	19-13671965
41	17.32729614	91	21.19314036	41	15.94580750	91	19.16256564
42	17:48506287	92	21.22378694	42	16.07932301	92	19.18761743
43	17.63727212	93	21.25350142	43	16.20795183	93	19:21190063
44	17.78414944	94	21.58531331	44	16.33190430	94	19.23544000
45	17:92590930	95	21.31025103	45	16.45137961	95	19.25825932
46	18.06275579	96	21.33734211	46	16.26626626	96	19:28038162
47	18-19488327	97	21.36361324	47	16.67764431	97	19.30182917
48	18.32247691	98	21.38909007	48	16.78478292	98	19:32262341
49	18.44571319	99	21.41379745	49	16.88814389	99	19:34278505
50	18.56476045	100	21.43775939	50	169878 8076	100	19136233409

Present Value of £1 per Annum in n years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	51 per cent.	Years	51 per cent.	Years	6 per cent.	Years	6 per cent.
-1	0.94786729	51	15.73964779	I	0.94339622	51	14.20133239
2	1.82611433	52	15.81848386	2	1.80959173	52	14.65906309
3	2.64179600	53	15.89453508	3	2.60735549	53	14.72435148
4	3.40104768	54	15.96791494	4	3.34417912	54	14.78730296
5	4.10023039	55	16.03873135	5	4.02650128	55	14.84801476
5	4.77104927	56	16·10708698	6	4.65988652	56	14.90657914
7	5:39065094	57	16-17307959	7	5.24916876	57	14.96308386
8	5.97170408	58	16.23680223	7 8	5.79856743	58	1501761223
9	6.51746635	59	16.29834363	9	6.31178221	59	15 07024359
10	7.03084046	60	16.35778836	10	6.79207063	60	15.12105340
11	7.51442124	61	16.41521709	111	7.24231231	61	15.17011355
12	7.97053545	62	16.47070440	12	7.66506220	62	15.51749047
13	8.40127557	63	16.2433115	13	8.06259515	63	15.26325569
14	8.80852857	64	16·57616025	14	8.43694329	64	15:30746527
15	9.19400024	65	16:62626130	15	8.78992755	65	15'35018073
16	9.559237.94	66	16 ⁻ 67472348	16	9.12318449	66	15:39145878
17	9.90564581	67	16.72153314	17	9:43818902	67	15.43135368
18	10.23450360	68	16.76682410	18	9.73627395	68	15.46991720
19	10.54697892	69	16.81062764	19	1001864665	69	15.20719891
20	10.84413953	7Ó	16.85299759	20	10.58640322	70	15.54324614
21	11.12696376	71	16.89398560	21	10.54054258	71	15.57810426
22	11.39634974	72	16.93364115	22	10.78197401	72	15.61181665
23	11.65312343	73	16 97 201 168	23	1101152985	73	15.64442488
24	11.89804576	74	17:00914266	24	11:22997214	74	15.67596872
25	12.13181886	75	17:04507782	25	11:43800013	75	15.70648640
26	12.35509172	76	17:07985894	26	11.63625663	76	15.73601441
27	12.56846510	77	17·11352637	27	11.82533363	77	15.76458791
28	12.77249587	78	17.14611870	28	12.00577717	78	15.79224054
29	12.96770103	79	17·17767304	29	12·17809177	79	15.81900459
3ó	13.15456122	80	17.20822508	30	12.34274429	80	15.84491110
31	13.33352377	81	17:23780909	31	12.50016738	81	15.86998982
32	13.20200267	82	17:26645804	32	12.65076257	82	15.89426936
33	13.66939600	83	17:29420365	33	12:79490302	83	15.91777724
34	13.82705824	84	17:32107639	34	12.93293595	84	15.94053985
35	13.97833245	85	17:34710567	35	13°06518494	85	15 962 58263
36	14.12353690	86	17:37231973	36	13.19195181	86	12.08393001
37	14.26297006	87	17:39674572	37	13.31351849	87	16.00460546
38	14:39691190	88	17:42040988	38	13.43014857	88	1602463163
39	14.52562541	89	17:44333746	39	13.54208886	89	16.04403029
40	14.64935783	90	17.46555272	40	13.64957061	90	1606282237
41	14.76834182	91	17:48707913	41	13.75281077	91	1608102803
42	14.88276854	92	17.50793922	42	13.85201308	92	16.09866632
43	14.99292852	93	17.52815479	43	13.94736899	93	16.11575734
44	15.09893268	94	17.54774684	44	14:03905867	94	16.13231771
45	15.20099307	95	17.56673558	45	14.12725179	95	16-14836526
46	15.29928356	96	17.58514052	46	14.51510819	96	16.16391678
47	15.39396864	97	17:60298056	47	14.29377873	97	16.17898846
48	15.48520398	98	17.62027383	48	14:37240580	98	16.19359586
49	15.57313700	99	17 63703788	49	14.44812393	99	16.20775403
50	15.65790744	100	17 65328964	50	14.52106035	100	16.22147744

Present Value of £1 per Annum in n years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	7 per cent.	Years	7 per cent.	Years	8 per cent.	Years	6 per cent.
1	0°93457943	51	12.73336709	1	0792592592	51	11-29511823
2	1'77742755	52	12.78491442	2	1.74638679	52	11.33565999
3	2.54109998	53	12.83454758	3	2.47812827	53	11-37466127
.4	3.23596273	54	12.88235073	4	3.13453049	54	11.41219109
	3.87064953	55	12.92840350		3.72641314		11.44831867
5		33	12 92040 330	5	4.56565001	55	11.48310336
	4.45240930		129/2/0124	~		56	
7 8	4.98737312	57	1301555539	7 8	4.75045044	57	11.51660525
	5.48076177	58	13.05679360		5.19598235	58	11.54887815
9	5 93704863	59	1309656008	9	5.60431757	59	11.57998092
10	6.36008890	60	13.13491577	10	597977020	60	11.60995762
11	6.75322282	61	13.17191855	111	6.32601306	61	11-63885769
12	7.11935891	62	13.20762187	12	664619261	62	11 66672495
13	7 46104157	63	13.24208274	13	6.94301992	63	11.69360579
14	7:78050638	64	13.27534625	14	7.21884378	64	11.71953712
75	807972553	65	13:30746136	15	7:47570879	65	11.74455874
16	8.36044561	66	13.33847318	16	7.71540350	66	11.76870731
17	8.62421894	67	13'36842477	17	7 93949915	67	11.79201775
18 l	8.87242987	68	13.39735714	18	8.14938169	68	11.81452327
19	9.10631693	69	13.42530947	19	8.34627837	69	11.83625553
20	9.32699156	70	13.45231908	20	8.53127981	70	11.85724469
21	9.53545399	71	13.47842168	21	8.70535854	71	11.87751951
22	9:73260687	72	13.20362136	22	8.86938454	72	11.89710745
23	97320007	73	13.2804071	23	902413845		11 91603469
- ,	1009617455	74	13.55162087	24	9.17032276	73	11 93432623
24	10.36400341					74-	
25		75	13.57442171	25	9.30857133	75	11.95200601
26	10.42336690	76	13.59647167	26	9.43945760	76	11.96909681
27	10.57482526	77 78	13.61779815	27	9.56350167	77	11.98562054
28	10.71889100		13.63842730	28	968117627	78	1200159807
29	10.85603399	79	13.65838417	29	9.79291212	79	1201704940
30	1098668576	80	13-67769284	30	9.89910248	80	1203199369
31	11-11124336	81	13.69637630	31	10'00010712	18	1204644927
32	11.23007273	82	13.71445668	32	1009625586	82	12.06043372
33	11.34351170	83	13.73195520	33	10.18482126	83	1207396389
34	11:45187260	84	13.74889221	34	10.27517289	84	12708705592
35	11.55544472	85	13.76528728	35	10:35847667	85	1209972533
36	11.65449628	86	13:78115918	36	10.43799996	86	12.11198697
37	11.74927640	87	13.79652592	37	10.21396192	87	12.12385511
38	11.84001673	88	13.81140487	38	10.28626229	88	12.13534346
39	11.92693299	89	13.82581271	39	10.65599912	89	12.14646518
40	12.01022629	90	13.83976543	20	10.72243731	90	12.15723291
41	12 09008435	91	13.85327848	41	10.78604269	91	12·16765882
42	12.16668261	92	13.86636665	42	10.84696661	92	12.17775456
43	12.24018213	93	13.87904425	43	10'90535014	93	12.18753138
	12.31074584	94	13.89132502	44	10 961 32498	94	12.10/33130
44			13.90322216	11	11.01501421		12.30012108
45	12.37850870	95	13 90 32 22 10	45	11.06653293	95	
46	12.44360902					96	12.21505434
47	12.20617391	97	13.92591610	47	11.112988999	97	12-22365953
48	12.56632288	98	13.93673700	48	11.16348350	98	12.23199590
49	12.62416843	99	13.94722251	49	11.50011134	99	12.24007238
50	12.67981654	100	13:95738361	50	11.25296164	100	12.24789756

Present Value of £1 per Annum in n years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	9 per cent.	Years	9 per cent.	Years	10 per cent.	Years	10 per cent.
1	0.01743110	51	10.14879934	1	0.00000000	51	9.21371763
2	1.71641160	52	10·18151776	2	1 68744805	52	9.24067663
3	2.41820212	53	10.515042	3	2.36110281	53	9:26657763
4	303926384	54	10.24321656	4	2 94961719	54	9°29147106
5	3.59254024	55	10°27231169	5	3.46795265	55	9.31540432
	4°0883492 2	56	10.30030831		3 92776833	56	9.33842205
7 8	4.23501671	57	10:32725595	8	4.33827521	57	9.36056631
8	4.93933536	58	10.35320134	8	4.70684834	58	9.38187675
9	5:30690193	59	10:37818866	9	503946260	59	9.40239080
20	5.64236947	60	10.40225968	10	5.34100996	60	9.42214381
11	5-94963818	61	10.42545395	111	561553421	61	9.44116920
12	6.53300176	62	10.44780794	12	5.86640717	62	9:45949778
13	6.49226099	63	10.46936009	13	609646272	63	9.47716189
14	6.73281256	64	10.49014113	14	6.30810001	64	9.49418747
15	695571945	65	10.21018401	15	6.50336371	65	9.21060221
16	7.16276711	66	10.52951904	16	6.68400724	66	9.52643161
17	7:35550861	67	10.24817507	17	6.85154279	67	9.54169987
18	7.53530123	68	10.26617923	18	7.00728147	68	9.55642998
19	7.70333646	69	10.28352848	19	7.15236567	69	9.57064382
20	7.86066453	70	10-60033681	20	7.28779538	70	9.58436215
21	800821473	71	10-61653813	21	7.41444968	71	9.59760476
22	8.14681242	72	10.63218498	22	7.53310452	72	9.61039048
23	8.27719308	73	10 64729886	23	7.64444741	73	9.6227,3727
24	8.40001433	74	10.66190027	24	7.74908969	74	9 63466219
25	8.51586588	75	10.67600879	25	7.84757677	75	9.64618160
26	8.62527813	76	10.68964308	26	7.94039682	76	9.65731100
27	8.72872949	77	10.70282102	27	802798812	77	9.66806530
28	8.82665248	78	10.71555967	28	8.11074519	78	9.67845866
29 30	8·91943927 9·00744615	79	10 [.] 72787532 10 [.] 73978361	29 30	8·18902423 8·26314758	79	9 [.] 68850463 9 [.] 69821618
31	9:09099762	81	10.75129944	31	Q.22240772	81	9.70760568
32	9:17038984	82	10,76243712	32	8·33340772 8·40007061	82	9.71668501
33	917630904	83	10.77321036	32	8.46337865	83	972546550
34	9:31775723	84	10.78363226	34	8.52355323	84	972340530
35	9.38620846	85	10.79371546	35	8.58079697	85	9,74217298
36	9.45145689	86	10.80347187	36	8.63529565	86	9.75012036
37	9.21369261	87	10.81291318	37	8.68721995	87	9.75780969
38	9.57310279	88	10.82202046	38	8.73672694	88	976525016
39	9.62984312	89	10.83089437	39	8.78396322	89	9.77245057
40	9.68406907	90	10'83945511	10	8.82905708	90	977941934
41	9.73592199	91	10.84774252	41	8.87213759	91	9.78616458
42	9.78553310	92	10.85576602	42	8.91331747	92	9.79269406
43	9.83302440	93	10.86353468	43	8.95270294	93	9.79901526
44	9.87850946	94	10.87105723	44	8.99039267	94	9.80513536
45	9.92209413	95	10.87834204	45	9.02647844	95	9.81106124
46	996387718	96	10.88539716	46	9.06104571	36	9.81679954
47	1000395091	97	10.89223037	47	9.09417419	97	9.82235666
48	1004240165	98	10.89884912	48	9.12593827	98	9.82773872
49	10.07931023	99	10.00526059	49	9.12640751	99	9.83295159
50	1011475243	100		50	9.18564698	100	9.83800099
,		,	,,,	'	73-4-30	,,	z 2

Present Value of £1 per Annum in n years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

	99A	W	22	Years	12 per cent.	Years	12 per cent.
Coars	11 per cent.	Years	11 per cent.	I Gairs			12 per cent
1	0.00000000	51	8-43641058	3	0.89285714	51	778005334
2	1 65944576	52	8.45900713	2	1 63235767	52	7.79926661
3	2·30664351	53	8:48070639	3	2*25463707	53	7.81770941
4	2.86510749	54	8.50155183	4	2.78530549	54	7.83541958
5	3.35171670	55	8.52158429	5	3.24301986	55	7.85243263
	3.77932519	56	8.54084216		3.64169375	56	7.86878192
7 8	4.15789431	57	8-55936159	7 8	399191472	57	7:88449883
8	4.49526312	58	8.57717661		4.30188219	58	7:89961286
9	479768505	59	8-59431931	9	4.57804488	59	791415183
10	5°07020 956	60	861081997	10	4.82554435	60	7.92814194
11	5.31695858	61	8-62670718	11	5 0485 3032	61	7-94160792
12	5.24133018	62	864200729	12	5.25038880	62	7~95457255
13	5.74615078	63	8.65674788	13	5.43391011	63	7 96705961
14	5 9 3 3 7 9 0 5 6	64	8.67095111	14	5.60141437	64	7 97908827
15	6.10625194	65	8.68464059	15	5.75484651	65	7:99067885
16	6.26523826	66	8.69783802	16	5.89584926	66	800185006
17	6.41220764	67	8.71056399	17	602581957	67	801261963
18	6.54841556	68	8.72283807	18	6.14595301	68	802300439
19	6.67494892	69	8.73467882	19	6.25727876	69	803302030
2ó	679275341	70	8-74610388	20	6.36068759	70	804268251
21	690265574	71	8-75713003	21	6.45695441	71	805200544
22	7.00538179	72	8.76777324	22	6.24672620	72	806100279
23	7.10157151	73	8.77804870	23	6.63468843	73	80696875
24	7.19179133	74	8.78797089	24	6.70927432	74	80780722
25	7.27654436	75	8.79755360	25	6.78297796	75	80861685
26	7:35627907	76	8.80680998	26	6.85221129	76	80939878
27	7.43139649	77	8.81575258	27	6.91734142	77	8.1015407
28	7.50225630	78	8.82439339	28	6 9 7 8 6 9 6 5 9	77 78	8.1088376
29	7.56918207	79	8.83274383	29	7.03657119	79	8-1158822
10	7.63246568	80	8.84081484	30	709122998	80	8-1227018
31	769237108	81	8.84861685	31	7.14291180	81	8-1292873
32	7.74913758	82	8.85615985	32	7.19183258	82	8-1356533
33	7.80298268	83	8.86345340	33	7.23818812	83	8.1418080
34	7.85410446	84	8.87050663	34	7.28215629	84	8-1477591
35	7.90268372	85	8.87732830	35	7.32389914	85	8-1535140
36	7.94888585	86	8.88392680	36	7.36356452	86	8.15908016
	7.99286241	87	8.89031015	37	7.40128767	87	8.1644639
37 38	8.03475255	88	8.89648605	38	7.43719253	4 88	8.1696722
	807468427	89	8.90246188	39	7.47139288	89	8-1747113
39 10	8.11277550	90	8.90824473	10	7.50399337	90	8.1795870
41	8-14913511	91	891384139	41	7.53509041	91	8-18430539
42	8.18386372	92	891925838	42	7.56477300	92	8.1888717
43	8.21705446	93	8.92450195	43	7.59312338	93	8-19329149
43	8-24879372	93	8.92957813	44	7.62021768	94	8.1975697
	8.27916170		8.93449269	45	7.64612652	95	8-20171139
45 46	8.30823293	95	8 9 3 9 2 5 1 1 8	46	7.67091541	96	8.2057211
. ,	8-33607684		894385894	47	7.69464530	97	8-2096035
47 48		97	8.94832109	48	7.71737290	98	8.5133630
	8·36275813 8·38833718	99	8.95264258	49	7.73915109	99	8.5120036
49							

Present Value of £1 per Annum in n years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

				- 11		. [[
1	0.88495575	51	7.21845378	1	0.87719298	51	6.73247331
2	1.60613973	52	7.23499042	2	1.28072066	52	6.74685603
3	2.50405404	53	7.25085837	3	2.15735598	53	6.76065300
4	2.70982849	54	7.26609087	4	2.63833416	54	6.77389360
	3.14112169	55	7.28071907		3.04548828	55	6.78660539
5	3.21373430	56	7.29477220	5	3.39446193	36	6.79881419
	3.83867796	57	7.30827775		3.69677084	57	6.81054426
7 8	4.12445308	58	7.32126154	7 8	3.96108019	58	6.82181838
9	4.37763479	59	7.33374789	9	4.19403222	59	6.83265798
10	4.60340500	60	7:34575968	10	4.40081754	60	6.84308324
11	4.80590285	61	7:35731853	1	4.58552689	61	6.85311316
12	4.98847449	62	7.36244430	12	4.75144964	62	6.86276527
13	5.15385430	63	7:37915772	13	4.90125097	63	6.87205774
14	5.30429862	64	7.38947550	14	5 03711500	64	6.88100230
15	5.44168585	65	7:39941534	15	5.16084867	65	6.88962348
16	5.56759240	66	7.40899351	16	5.27395982	66	6.89792658
17	5.68335109	67	7.41822544	17	5.37771658	67	6.90592813
18	5.79009641	68	7.42712576	18	5.47319324	68	6.91364095
19	5.88880012	69	7:43570834	19	5.26130593	69	6.92107723
20	5.98029942	70	7.44398632	20	5.6 4284066	70	6 92824846
21	606531949	71	7.45197223	21	5.71847567	71	6.93516562
22	6.14449160	72	7:45967795	22	5.78879931	72	6.94183910
23	6.21836784	73	7:46711476	23	5.85432441	73	6.94827881
24	6.28743318	74	7.47429343	24	5°91550007	74	6.95449413
25	6.35211538	75	7.48122419	25	5.97272123	75	6.96049402
26	6.41279315	76	7.48791677	26	6.02633665	76	6 96628700
27	6:46980306	77	7 ·49438050	27	6.07665542	77	6 9 7 1 8 8 1 1 9
28	6.2344515	78	7.50062422	28	612395247	78	6.97728434
29	6.57398785	79	7:50665638	29	6.16847318	79	6.98250381
30	6.62167199	80	7.51248505	30	6.51043721	80	6.98754666
31	6-66671428	81	7.51811795	31	6.25004184	81	6.99241960
32	6.70931022	82	7.52356242	32	6.28746471	82	6.99712905
33	6.74963672	83	7.52882552	33	6.32286622	83	7:00168116
34	6.78785415	84	7.53391396	34	6.35639156	84	7.00608178
35	6.82410833	85	7.53883418	35	6.38817251	85	7.01033654
36	6·85853208 6·89124668	87	7.54359236	36	6.41832893	86	7.01445078
37 38		88	7.54819437	37	6.44697007	87 88	7.01842965
	6·92236306 6·95198292	89	7·55264587 7·55695229	38	6.47419573	89	7 02227808
39 40	6.98019965	90	7.56111880	39 40	6·50009727 6·52475848	90	7:02600076 7:02960222
41	7:00709916	91	7.56515038	41	6.54825634	91	7 ·03308679
42	7.03276063	92	7.56905180	42	6.22066172	92	7.03645861
43	7.05725714	93	7.57282765	43	6.59203993	93	7:03972166
44	7.08065626	94	7.57648233	44	661245131	94	7 04287978
45	7.10302058	95	7.58002002	45	6.63195168	95	7:04593662
46	7.12440809	96	7.58344482	46	6.65059272	96	7.04889570
47	7.14487269	97	7·58676060	47	6.66842240	97	7.05176042
48	7.16446446	98	7.58997112	48	6.68548525	38	7.05453402
49	7.18323006	99	7.59307996	49	6.70182272	90	7:05721963
.80	7.20121297	200		50	6.71747341	100	

Present Value of £1 per Annum in n years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	15 per cent.	Years	15 per cent.	Years	16 per cent.	Years	16 per cent.
-	0.86956522	51	6.30780221	1	0.86206897	51	593352706
2	1.55615178	52	6.32042599	2	1.53230676	52	5'94469589
3	2.11179700	53	6.33253245	3	2.06812245	53	5 95540453
4	2.57051537	54	6.34414778	4	2.50609579	54	5.96567645
	295547950	55	6.35529650		2.87063837	55	5.97553362
5	3.58305103	56	6.36600128	5	3.12866480	38	598499660
	3.56498164		6.37628458		3.44226550	1 - 1	5 99408468
7 8		57		7 8	3.67031217	57	
	3.81015682	58	6.38616575			58	600281597
10	4·21530947	59 60	6·39596412 6·40479761	10	3·86946204 4·04480828	59 60	601120748 601927520
-	4 21530947		0 404/9/01		4 04400020	"	0 0192/320
11	4.38447558	61	6.41358306	11	4.20031384	61	602703421
13	4.53592734	62	6.42203601	12	4.33910853	62	6.03449835
13	4.67225216	63	6.43017259	13	4·46369698	63	6'04168199
14	4.79555727	64	6.43800578	14	4.27610741	64	6.04859677
15	4:90757610	65	6.44554940	15	467799970	65	605525495
16	500974773	66	6.45281606	16	4.77074542	66	606166779
17	5.10327681	67	6.45981776	17	4.85548783	67	6 c 6 7 8 4 5 9 6
18	5.18917943	68	6.46656581	18	4 9 3 3 1 8 7 4 8	68	6.07379956
19	5.26831861	69	6.47307098	19	5.00465733	69	607953816
20	5.34143215	70	6.47934344	20	5.07059003	70	608507081
21	5.40915449	71	6.48539288	21	5.13157943	71	600040612
22	5.47203423	72	6.49122847	22	5.18813757	72	609555225
23	5.53054818	73	6.49685894	23	5.24070828	73	6.10021696
24	5.58511272	74	6.20229257	24	5.28967823	74	6.10530761
25	5.63609310	75	6.50753728	25	5.33538579	75	6.10993153
26	5.68381106	1 76	6.21260055	26	5.37812840	76	6.11439447
27	5.72855111	77	6.51748956	27	5.41816855	77	6.11820360
28	5.77056577	78	6.2221113	28	5.45573877	78	6.13386404
) · (11 1		1 ' 1	
29 30	5·81007995 5·84729465	79 80	6·52677172 6·53117758	29 30	5·49104580 5·52427407	79	6·12688399 6·13876634
.	5 04/29405		0 5311//30	30	3 3242/40/		0.130/0034
31	5.88239001	18	6.53543459	31	5.55558862	81	6.13451723
32	5.91552798	82	6.53954841	32	5.58513760	82	6.13814166
33	5.94685456	83	6.24325444	33	5.61305438	83	6.14164444
34	5.97650171	84	6.54736784	34	5.63945932	84	6.14203011
35	6.00458901	85	6.55108353	35	5.66446138	85	6.14830306
36	6.03122507	86	6.55467624	36	5 688 1 5937	86	6-15146747
37	6.05650876	87	6.55815048	37	5.71064316	87	6.15442731
38	6.08053030	88	6.56151056	38	5.73199463	88	6.15758644
39	6.10337215	89	6.56476063	39	5.75228857	89	6.16034820
40	6.12510986	90	6.56790465	40	5.77159342	96	6.16311700
41	6.14581277	91	6.57094642	41	5.78997193	91	6.16579532
42	6.16554464	92	6.57388959	42	5.80248126	92	6.16838666
43	6.18436417	93	6.57673764	43	5.82417592	93	6.14080413
43	6.20232526	94	6.57949393	44	5.84010334	94	6.17332067
	6.21947885	95	6.28216168	45	5.85530914		6.17266912
45	6.23587038	96	6.58474397	46	5.86983508	95	
46				11 ' 1		96	6.17794228
47	6.25154310	97	6.58724377	47	5.88371982	97	6.18014271
48	6.26653685	98	6.58966394	48	5:89699922	98	6.18227293
49	6.28088869	99	6.200021	49	5.00970060	99	6.18433537
50	6.29463310	100	6.59427620	1 50	5.02187293	100	6.18633336

Present Value of £1 per Annum in n years; Redemption of Capital being at 3, per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	17 per cent.	Years	17 per cent.	Years	18 per cent.	Years	18 per cent.
	0.85470085	51	5.60117955		0.84745762	51	5.30408806
2	1.20018142	52	561113120	2	1.48674381	52	5.31301117
3	2.02621779	53	5.62067084	11 1	1.98597756	53.	5.32126329
4	2.44482611	54	5.62981963	3	2.38648080		5.32976355
	2.79053228	55	5.63859734	4		54	5.33762988
5	3.08073842	56	5.64702249	5	2·71477559 2·98866548	55	
	3.32771666						5'34517903
7 8		57	5.65511245	7 8	3.55024601	57	5.35242670
- 1	3.24036956	58	5.66288350		3.41931323	58	5.35938762
9 10	3·72531249 3·88756378	59 60	5 [.] 67035092 5 [.] 67752911	10	3·59151725 3·74208773	59 60	5·36607561 5·37250365
11	403099923	61	5.68443158		3 87480583	61	5.37868337
12	4.15865977	62	5.69107078	12	3.99262027	62	5.38462780
13	4.27296478	63	5.69745960	13	4.09786448	63	5.39034677
14	4.37586321	64	5.70360849	14	4.10540015	64	5.39585031
15	4.46894258	65	5.70952844	15	4.52222312	65	5.40114834
i6	4.22320910	66	5.41522956	61	4.35519490	66	5 40624996
17	4.63064731	67	5.72072140	17	4.42570837	67	5.41116380
18	4.70126525	68	5.42601301	iś	4.49017043	68	5.41589799
19	4.76612890	69	5.73111296	19		69	5.43046036
20	4.82588898	70	5.73602936	20	4·5493 0 32 4 4·60371863	70	5.42485793
21	4.88110181	71	5'74076991	21	4.65393835	71	5.42909789
22	4.93224587	72	5.74534193	22	4.70041008	72	5.43318677
23	4.97973490	73	5.74975234	23	4.74352017	73	5.43713078
24	5.02392857	74	5.75400774	24	4.78360374	74	5.44093587
25	5.06514098	75	5.75811440	25	4.82095292	75	5.44460766
26	5.10364768	76	5.76207827	26	4.85582355	76	5.44815152
27	5.13969141	77	5.76590505	27	4.88844064	77	5.45157255
28	5.17348684	78	5.76960012	28	4.91900288	78	5.45486561
29	5.50252424	79	5.77316865	29	4.94768635	79	5.45806533
3ó	5.23507422	80	5.77661554	30	4.97464772	80	5.46114612
31	5.26318757	81	5.77994548	31	5.00002678	81	5.46412219
32	5·28970055	82	5.78316293	32	502394870	82	5.46699755
33	5.31473539	83	5.78627217	33	5.04652589	83	5.46977604
34	5.33840230	84	5.78927728	34	5.06785957	84	5.47246132
35	5.36080089	85	579218215	35	5.08804113	85	5.47505688
36	5.38202142	86	5.79499051	36	5.10212333	86	5.47756608
37	5.40214588	87	5.79770592	37	5.12527125	87	5.47999209
38	5.42124893	88	5.80033179	38	5.14246320	88	5.48233800
39	5.43939866	89	5.80287140	39	5.15879143	89	5.48460672
ko	5.45665734	90	5.80532785	40	5.17431282	90	5.48680106
41	5.47308202	91	5.80770417	41	5.18907945	91	5.48892371
42	5 48872505	92	5.81000320	42	5.50313002	92	5 49097724
43	5.50363456	93	5.81222770	43	5.51623221	93	5.49296412
44	5.51785491	94	5.81438033	44	5.55330951	94	5.49488672
45	5.53142699	95	5.81646360	45	5.24149739	95	5.49674729
46	5.54438861	96	5.81847995	46	5.25313442	96	5.49854804
47	5.55677476	97	5.82043172	47	5.26425212	97	5.20029104
48	5.56861787	98	5.82232115	48	5.27487996	98	5.50197830
49	5.57994804	99	5.82415038	49	5.28504526	99	5.50361176
50	5 59079326	100	5.82592149	5ó	5.29477343	200	

Present Value of £1 per Annum in n years; Redemption of Capital being at 3 : per cent, with interest allowed to a Purchaser at the following rates per cent.

ears	10 per cent.	Years	19 per cent.	Years	20 per cent.	Years	20 per cent.
1	0.84033613	51	5.03692511	ī	0.83333333	51	4.79538515
2	1 46496356	52	5.04 197 1 29	2	1.44381223	52	4.30267758
3	1.94730452	53	5.05268164	3	1.01010880	53	4.80966460
4	2.33085539	54	5.06007360	4	2.27776400	54	481636213
	2.64302344	55	5.06716342		2.57496647	55	482278505
5	2.00193631	56	5.07396644	5	2.82009884	33	482894728
2		1 20					
7 8	3.12005295	57	5.08049683	7 8	3.02566044	57	483486183
	3.30626179	58	5.08676801		3.50014664	58	4.84054092
9	3.46699937	59	5.09279251	9	3.35082624	59	4.84599599
0	3.60710564	60	509858214	10	3.48152434	60	4.85123779
11	3.73026530	61	5.10414798	111	3.59512046	61	4.85627644
12	3.83933039	62	5.10920053	12	3.69737591	62	4.86112123
13	3.93654999	63	5.11464943	13	3.78745494	63	4.86578175
14	4.02371839	64	5.11960414	14	3.86807783	64	4.87026581
15	4.10328202	65	5.12437334	15	3794052921	6.5	4.87458158
16	4.17343373	66	512896528	16	4°00523612	66	4.87873658
17	4'23814062	67	5.13338778	17	4.06582523	67	4.88273799
18	4.29721801	68	5.13764820	18	4.1301622	68	4.88649228
19	4.35134726	69	5.14175355	19	416990041	69	4.89030607
BO	4.40110418	70	5.14571044	20	4.51557244	70	4.89388527
21	4.44697870	71	5.14952513	21	4.25764225	71	4.89733561
22	4.48939033	72	5.12320359	22	4.29550352	72	4.90066248
23	4.52870036	73	5.15675146	23	4.33249466	73	4.90387102
24	4.56522163	74	5.16017410	24	4.36590824	74	4.90695611
25	4 59922638	75	5.16347652	25	4.39699847	75	4.90995237
26	4.63095266	76	5 16666384,	26	4.42598728	76	4.01283421
27	4.66060951	77	5.16974040	27	4.45306934	77	4.91561582
28	4.63838127	78	5.12211068	28	4.47841605	78	4.01830110
20	4.71443109	79	5.17557885	29	4.20217896		4.03089410
30	4.73890394	80	5.17834892	30	4.52449259	79	4.92339818
31	4.76192905	18	5.18102467		4.54547668	81	4.92581688
	4.78362199	82	5.18360974	31		82	
32	4.80403643	83	5.18610228	32	4·56523825 4·58387320		4.92815349
33				33		83	4.93041115
34	4.82341564	84	5.18852149	34	4.50146772	84	4.93259285
35	4.84169376	85	5.19032464	36 35	4.61809953	85	4.93470146
36	4.85899691	86	5.19311004		4.63383882	86	4.93673972
37	4.87539403	87	5.19529058	37	4.64874924	87	4.93871023
38	4.39094800	88	5.19739903	38	4.66288854	88	4.94061252
39	4.90571578	89	2.19913800	39	4.67630934	89	4.94245796
10	4.91974959	90	5.50141004	40	4.68905950	90	4.91423985
41	4.93309712	91	5.20331758	41	4.70118319	91	4.94596340
42	4.94580209	92	5.50216533	42	4.71272027	92	4:94763069
43	4.95790466	93	5.20694832	43	4.72370773	93	4.94924375
44	4.96944174	94	5.20867588	44	4.73417915	94	4.95080452
45	4.93044737	95	5.21034765	45	4.74416665	95	4.95231483
46	4.99095295	96	5.21196560	46	4.75369812	96	4.95377648
47	5.000098753	97	5.31353162	47	4.75280047	97	4.95519117
48	5.01057799	98	5.21504752	48	4.77149834	98	4.95656053
49	5.01974934	90	5.51621205	49	4.77981454	99	4.95788615
55	5.02852445	130	5.21793581	50	4.78777025	100	4.95916952

TABLE VII.

Present Value of £1 per Annum in n years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

her	Cent. With in	oci cou a	anowed to a 1 d	1 CHASE		ing rai	er per cent.
Years	21 per cent.	Years	21 per cent.	Years	22 per cent.	Years	22 per cent.
1	0.82644628	51	4.57595069	1	0.81967213	51	4:37571991
2	1 42326299	52	4.28259023	2	2.40329047	52	4.38179099
3 1	1.87430757	53	4.58895142	3	1.83982362	53	4.38760630
4	2.22703735	54	4.59504798	4	2.17852087	54	4.39317928
5	2.51032641	55	4.60089383	5	2.44885222	55	4.39852248
	2.74275056	56	4.60650174	5 6	2 66953196	56	4.40364763
7 8	2.93680276	57	4.61188363	7 8	2.85301533	57	4.40856571
8	3.10119456	58	4.61705069	8	3.00791333	58	4.41328699
9	3.24218622	59	4.62201341	9	3.14036959	59	4.41782112
10	3.36439221	60	4.62678162	10	3.25488511	60	4.42217714
11	3.47128874	61	4 631 36458	11	3~35483280	61	4.42636354
12	3°56554433	62	4.63577079	12	3.44279013	62	4.43038815
13	3*64924156	63	4.64000904	13	3.2076020	63	4.43425902
14	3.72402947	64	4.64408645	14	3.59032472	64	4.43798270
15	379123086	65	4.64801051	15	3.65274680	65	4.44156606
16	3.85191914	66	4.65178809	16	3.70904955	66	4.44501539
17	3:90697448	67	4.65542567 .	17	3.76007851	67	4.44833666
18	3.95712540	68	4.65892940	18	3.80649752	68	4.45153550
19	4.00298013	69	4.66230508	19	3.84890906	69	4.45461723
20	4.04502041	70	4 66555821	20	3.88778745	70	4.45758689
21	4.08376994	71	4 66869399	21	3.02355153	71	4.46044927
22	4·11950868	72	4.67171738	22	3.95651952	72	4·46320887
23	4.15258417	73	4 67463305	23	3°98701980	73	4.46587001
24	4.18327049	74	4.67744545	24	4.01529964	74	4:46843675
25	4.21180545	75	4.68015881	25	4 04 1 5 8 1 8 8	75	4:47091298
26	4.23839640	76	4.68277714	25	4.06606063	76	4.47330236
27	4.26322498	77	4.68530427	27	4.08890573	77	4:47560839
28	4.28645094	78	4.68774383	28	4.11026639	78	4.47783442
29	4.30821540	79	4.69009928	29	4.13027428	79	4.47998360
30	4.32864343	80	4.69237393	30	4.14904603	80	4.48205896
31	4.34784634	81	4.69457092	31	4.16668526	18	4 48406338
32	4.53592344	82	4.69659324	32	4.18328442	82	4.48599960
33	4.38296370	83	4.69874376	33	4.19892628	83	4:48787024
34	4.39904700	84	4.70072521	34	4.51368201	84	4:48967780
35	4.41424529	85	4.70264020	35	4.22762744	85	4.49142466
36	4.42862355	86	4.70449123	36	4 24081 387	86	4.49311312
37	4.44231061	87	4.70628067	37	4-25329884	87	4.49474534
38	4.45514987	88	4.70801080	38	4.26513185	88	4.49632341
39	4·467 39990	89	4.70968332	39	4.27635789	89	4.49784933
20	4·47903498	90	4.71130179	20	4.28701795	96	4.59932501
41	4.49009557	91	4.71286673	41	4.29714945	91	4.50075228
42	4:50061870	92	4.71438055	42	4.30678666	92	4.20213288
43	4.21063836	93	4.71584508	43	4.31596097	93	4 50346849
44	4.52018574	94	4.71726239	44	4 32470122	94	4.20426023
45	4.2928960	95	471863325	45	4.33303394	95 95	4.20601113
46	4.23797642	96	4.71996020	46	4.34098361	95	4.20722112
47	4.54627067	97	4.72124448	47	4.34857278	97	4 50839226
48	4.25419300	98	4.72248757	48	4.35582236	98	4 50952578
49	4.26177037	99	4.72369093	49	4.36275166	99	4.51062304
50	4.56901625	100	4.72485591	50	4.36937863	100	4.51168528

Present Value of £1 per Annum in n years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	23 per cent.	Years	23 per cent.	Years	24 per cent.	Years	24 per cent.
1	0.81300813	51	4.19227758		0.80645161	51	402359722
2	1.38387075	52	4.19784998	2	1.36498117	52	4.02872994
3	1.80658563	53	4.20318700	3	1-77452728	53	4.03364535
4	2.13207321	54	4°20830107	4	2 08756480	54	403835494
	2.39031689	55	4.21320377		2.33451460	55	404286944
5	2.00012090	56	4.21790592	5 6	2.23422791	56	404719888
7 8	2.77387621	57	4'22241765	7	2.69900904	57	405135263
8	2.92007985	58	4.22674845	8	2.83723045	58	405533946
9	3.04475309	59	4.23090721	9	2.95478712	59	405916759
10	3.12228195	60	4.23490226	10	305594980	60	4.06284475
11	3.24593704	61	4-23874144	11	3.14388840	61	4 06637818
12	3.32820692	62	4.54543192	12	3.5510023	62	4 06977453
13	3.40101878	63	4.24598121	13	3.5891 2403	63	4.07304067
14	3.46588808	64	4:24939527	14	3.34978812	64	4.07618218
15	3.2402315	65	4.25268045	15	3.40406318	65	4 07920490
16	3.27639914	66	4.25584254	16	3.45290932	66	408211418
17	3.62381168	67	4.25888203	17	3.49708395	67	408491511
18	3.66691644	68	4.56181911	18	3.23720991	68	4.08761246
19	3.70625854	69	4.26464368	19	3.57380412	69	409021076
20	3.74229498	70	4.26736537	20	369729920	70	4.09271430
21	3.77541168	7İ	4.26998859	21	3.63805994	71	4.09512713
22	3.80593688	72	4.27251749	22	3.66639616	72	4 09745309
23	3.83415144	73	4.27495603	23	3.69257261	73	4.09969584
24	3.86029714	74	4.27730795	24	3.71781697	74	4.10185882
25	3.88458327	75	4.27957682	25	3.73932603	75	4.10394533
26	3.90719184	76	4.28176602	26	3.76027085	76	4.10595848
27	3.92828198	77	4.28387876	27	3.77980075	77	4.10790125
28	3.94799335	78	4.28591810	28	3.79804671	78	4.10977645
29 30	3°96644906 3°98375807	79	4·28788697 4·28978813	29 30	3.81512411 3.83113492	79 80	4·11158678 4·11333478
						81	
31	4.00001714	81	4.50165453	31	3.84616969	82	4.11202291
32	4.01531250	82	4.29339779	32	3.86030903	1 1	4.11665348
33	4.02972126	83	4.29511122	33	3.87362497	83	4.11822872
34	4.04331256		4·29676681	34	3.88618207		4.11975073
35 36	4.05614859	85	4.29836676	35 36	3·89803836 3·90924616	85	4·12122154 4·12264308
	4.06828545	87	4·29991315 4·30140800		391985274	87	4.12401250
37 38	4.07977387	88	4.30285322	37 38		88	4.12534565
	4.09065982	89			3·92990094 3·93742967	89	4.152663013
39 40	4·10098509 4·11078774	90	4·30425063 4·30560199	39	3.94847434	90	4.12282224
		1 1		1 1		1 1	
41	4.12010249	91	4.30690897	41	3.95706726	91	4.12907354
42	4.15896111	92	4.30817319	42	3.96523798	92	4.13023550
43	4.13739271	93	4.30939619	43	3.97301354	93	4.13135954
44	4.14542401	94	4.31057943	44	3.98041878	94	4.13244702
45	4.15307960	95	4.31172434	45	2.98747652	95	4.13349925
46	4.16038210	96	4.31283227	46	3.99420779	96	4.13451746
47	4.16735243	97	4.31390452	47	4.00063200	97	4.13550287
3 48	4.17400990	98	4.31494234	48	4.00676705	98	4.13645662
49	4.18037240	99	4:31594694	49	4.01262954	99	4.13737982
50	4·186 45649	100	4.31691946	50	4.01823484	100	4.13827353

TABLE VII.

Present Value of £1 per Annum in n years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	25 per cent.	Years	25 per cent.	Years	25 per cent.	Years	25 per cent.
1	0.80000000	26	3.62399868	51	3.86796585	76	3.94401871
2	1.34660033	27	3.64213529	52	3.87270896	77	3.94581122
3	1.74358685	28	3.65907340	53	3.87725080	78	3.94754133
4	2 04487668	29	3.67492130	54	3.88160207	79	3.94921152
5	2.28125829	30	3.68977468	55	3.88577272	80	3.95082416
5	2.47159213	1 1	•	56	3.88977207	1 1	
7 8	2.62807701	31	3.70171840	57	3.89360880	81	3.95238151
8	2.75895261	32	3.71682798	58	3.89729107	82	3.95388571
9	2.86998516	33	3.72917088	59	3.90082651	83	3.95533882
10	2.96533078	34	3.74080748	60	3.90422226	84	3.95674279
1		35	3.75179207	11 1		85	3.95808949
11	3.04806078	39	3.76217353	61	3.90748506	86	3 95941071
12	3.12049395	37	3.77199605	62	3.91062107	87	3.96067815
13	3.18441376	38	3.78129961	63	3.91363666	88	3.96190344
14	3.24121436	39	3.79012054	64	3 9 1 6 5 3 7 0 0	89	3·96308813
15	3.29200137	40	3.79849186	65	3.01032720	90	3.96422373
16	3.33766285	1 1		66	3.92201313	1	
17	3.37892027	41	3.80644372	67	3.92459859	91	3.96534166
18	3.41636588	42	3.81400366	68	3.92708831	92	3.96651329
19	3.45049036	43	3.82119687	69	3.92948649	93	3.96744992
20	3.48170373	44	3.82804650	70	3.93177908	94	3.96845281
ı	_	45	3.83457379		_	95	3.96942317
21	3.21032126	46	3.84079833	71	3.93402385	96	3.97036215
22	3.53672578	47	3.84673816	72	3.93617036	97	3.97127085
23	3.56107725	48	3.85240996	73	3.92823998	98	3.97215035
24	3.58362036	49	3.85782915	74	3.94023591	99	3.97300165 ~
25	3.60454051	50	3.86301003	75	3.94216119	100	3.97382 575

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TABLE VIII.

FOR

VALUING MINERAL AND OTHER PROPERTIES.



Present Value of £1 per Annum in n years; Redemption of Capital being at 3½ per cent, with interest allowed to a Purchaser at the following rates per cent.

Years	4 per cent.	Years	4 per cent.	Years	5 per cent.	Years	5 per cent.
1	096153846	51	21'13201494	1	0.95238095	51	17:44544161
2	1.88181986	52	21.26560757	2	1.84706149	52	17.53638810
3	2.76293330	53	21'39449319	3	2.68864776	53	17.62394045
4	3.60683820	54	21.51884394	4	3'48127427	54	17.70823622
Š	4.41537415	55	21.63882521		4.23866286	55	17.78940661
5	519026988	56	21.75459601	5	4.93417298	56	17.86757685
	5.93315140	57	21 866 30921		5.60084480	57	17.94286655
7	6.64554948	58	21.97411174	7 8	6.22520486	58	1801538984
9	7:32890640	59	22 07814490	9	6.82845530	59	1808525590
Łó	7.98458223	60	22.17854463	1ó	7.39418726	60	18-15256901
11	8.61386051	61	22'27544161	11	7.93071941	61	18-21742888
12	9.21795350	62	22'36896161	12	8.43996175	62	18.27993089
13	9.79800697	63	22.45922569	13	8.92366560	63	18.34016634
14	10.35510463	64	22'54635030	14	9.38343964	64	18.39822259
15	10.89027219	65	22.63044743	15	9.82076424	65	18.45418320
16	11.40448117	66	22'71162503	16	10.23700398	66	18.50812832
17	11.89865227	67	22.78998699	17	1063341875	67	18.56013470
18	12.37365863	68	22.86563319	18	11.01117360	68	18.61027579
19	12.83032881	69	22.93866003	19	11-37134753	69	18.65862213
2ó	13.26944946	70	23.00016010	20	11.71494125	70	18.70524126
21	13.69176795	71	23.07722297	21	1204288419	71	18.75019797
22	14 09799461	72	23'14293439	22	12:35604066	72	18.79355442
23	14.48880504	73	23.20637735	23	12.65521553	73	18.83537025
24	14.86484209	74	23.26763169	24	12.94115921	74	18.87570270
25	15.22671774	75	23.32677432	25	13.21457214	75	18'91460670
26	15.57501483	76	23.38387935	26	13.47610887	76	18.95213497
27	15.91028880	77	23.43901828	27	13.72638181	77	18.98833821
28	16.23306916	78	23.49225988	28	13.96596448	78	19.02326502
29	16.54386089	79	23.53868290	29	14.19539426	79	1905369423
30	16.84314589	80	23.59331428	30	14.41517665	80	1908947455
31	17.13138406	81	23.64125274	31	14.62578471	81	19.12084536
33	17.40901467	82	23.68754530	32	14.82766440	82	19.12111601
33	17.67645726	83	23.73224934	33	15'02123506	83	1918032644
34	17.93411277	84	23.77542012	34	15'20689166	84	19.20851498
35	18.18236454	85	23.81711097	35	15.38500656	85	19.23571854
36	18.42157912	86	23.85737323	36	15.55593098	86	19.26197255
37	18-65210718	87	23.89625646	37	15.71999657	87	19'28731113
38	18.87428430	88	23.93380854	38	15.87751667	88	19.31176716
39	1908843171	89	23.97007548	39	16.02878754	89	19.33537218
Šó	19-29485698	96	24.00510189	40	16-17408954	90	19.35815666
41	19:49385477	91	24 0 3 8 9 3 0 5 2	41	16.31368810	91	19:38014978
42	19.68570725	92	24.07160286	42	16.44783466	92	19.40137977
43	19.87068499	93	24.10315887	43.	16.57676770	93	19.43187378
44	20'04904734	94	24.13363694	44	16.70071340	94	19.44165782
45	20.53104503	95	24.16307440	45	16.81988646	95	19.46075717
46	20.38691024	96	24.19150595	46	16.93449080	96	19.47919591
47	20.54687800	97	24.21896930	47	17.04472015	97	19.49699746
48	20.70116589	98	24.24549486	48	17.150/5884	98	19.51418431
49	20.84998443	99	24.27111581	49	17.25278206	99	19.53077805
50	20.99353605	100	24.29586324	50	17:35095670	100	19.54679955

Present Value of £1 per Annum for n years; Redemption of Capital being at 3½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	6 per cent.	Years	8 per cent.	Years	8 per cent.	Years	8 per cent.
1	0.94339623	51	14.85408150	1	0.92592593	51	11.45192496
2	1.81356385	52	14.91996511	2	1.75008600	52	11.49104523
3	2.61825218	53	14.98329369	3	2.48796954	53	11.52857360
	3.36415868		1504417770		3.1207694		11.26458443
4		54		4		54	
5	4.05710171	55	15.10272198	5	3.75260750	55	11.59914787
9	4.70216026	56	15.15902619		4.29796578	56	11.63233022
7 8	5:30378787	57	15.51318504	7 8	4°79513979	57	11.66419416
	5.86590610	58	15.26528859	8	5°24998743	58	11:69479896
9	6.39198169	59	15.31542254	9	5.66745617	59	11.72420076
10	6.88509076	60	15.36366848	10	605175334	60	11.75245273
11	7:34797233	61	15.41010412	111	6.40647963	61	11.77960525
12	7.78307334	62	15.45480349	12	6.73473466	62	11.80570612
13	8-19258657	63	15:49783721	13	703920125	63	11.83080073
14	8.57848288	64	15.53927262	14	7:32221326	64	11.85493216
15	8.94253860	65	15.57917390	15	7.58581053	65	11.87814132
16	9.28635904	66	15.61604066	16	7.83178390	66	11.90046713
17	9.61139850	67	15.65461674	17	8.06171197	67	11.92194663
18		68		18	827699180	68	
1	9.91897774	1 . 1	15.69027276	11 . 1			11 94261501
19	10.21029895	69	1572462396	19	8.47886419	69	11.96250584
20	10.48645876	70	15.75772145	20	8-66843504	70	11.98165105
21	10.74845964	71	15.78961407	21	8.84669316	71	12'00008109
22	10.99721972	72	15.82034860	22	9.01452540	72	12:01782498
23	11.23358157	73	15*84996976	23	9.17272948	73	12.03491043
24	11:45831980	74	15.87852040	24	9:32202495	74	1205136386
25	11.67214775	75	15.90604151	25	9.46306248	75	1206721049
26	11.87572345	76	15.93257234	26	9.59643200	76	1208247440
27	12.06965490	77	15.95815060	27	9.72266957	77	1209717863
28	12.25450471	78	15.98281228	28	9.84226344	78	12.11134516
29	12.43079427	79	16.00428643	29	9 9 5 5 6 5 9 2 4	79	12.12367203
30	12.59900747	80	1602952286	30	1006326456	80	12.13814833
31	12.75959397	81	16.05163672	31	10.16545293	18	12-15082435
32	12.91297221	82	16.07296403	32	1026256729	82	12.16304146
33	13'05953205	83	16.09353407	33	10.32492306	83	12.17481732
		84	16.11332404	34	10.44281086	84	12.18616880
34	13.19963714						
35	13.33362715	85	16.13251362	35	10.52649891	85	12.19711208
36	13.46181961	86	16.15097598	36	1060623513	86	12.20766265
37	13.28451178	87	16.16878689	37	1068224903	87	12'21783536
38	13.70198216	88	16.18597027	38	1075475338	88	12.22764447
39	13.81449197	89	16.20254902	39	10.82394574	89	12'23710360
40	13.92228646	90	16.21854526	40	10.89000975	90	12.24622588
41	14'02559610	91	16.23398012	41	1095311637	91	12-25502385
42	14.12463762	92	16.24887402	42	11.01342490	92	12 26350957
43	14.21961513	93	16.26324656	43	11.07108404	93	12.27169464
44	14.31072092	94	16.27711652	44	11.12623269	94	12.2795901
45	14,39813629	95	16.29020211	45	11.17900076	95	12.2872067
46	14.48203236	96	16.30342066	46	11.22950986	96	12.2945547
				11 -			
47	14.56257072	97	16.31588900	47	11.27787397	97	12.3016438
48	14.63990418	98	16.32792327	48	11.32420009	98	12.3084837
49	14.71417714	99	16.33953896	49	11.36858861	99	12.31508329
50	1478552641	100	16.35075103	150	11.41113396	100	12.3214213

Present Value of £1 per Annum for n years; Redemption of Capital being at $3\frac{1}{2}$ per cent. with interest allowed to a Purchaser at the following rates per cent.

1 1 09999991 51 931779189 1 089285714 51 785412999 2 1 169090154 52 934367369 2 1163558913 52 789010561 4 296514936 54 939223788 4 279915132 54 790059738 5 3149062834 55 941502300 5 326284103 55 79234908 6 3795775949 56 943687362 6 366746092 56 793856830 7 4'37551561 57 945783394 7 402342448 57 795339597 8 475712093 58 947794560 8 473883439 8 779571346 9 509045730 59 949724794 9 462008989 59 798124978 10 579885080 61 953357116 11 509964799 61 80688668 11 567885080 61 953357116 11 509964799 61 80688668 12 593528347 62 955066034 12 53049155 62 801893739 13 617049424 63 956707090 13 549264727 63 803050742 14 673688986 64 958285116 14 556345287 64 804161850 15 678652753 65 959801076 15 58198725 65 805229121 16 677117613 66 961282666 16 596356866 66 806254504 17 69423603 67 962659226 17 609559775 67 807239848 18 710142334 68 96400564 18 621825423 68 808186901 19 72491169 69 965310974 19 67315026 69 8090972697 21 751672922 71 967747209 21 65348514 71 810814513 22 776374799 72 96890876 22 605245097 72 811624197 23 77508815 73 97001108 23 67106520 73 81249311 24 785713650 74 971079692 24 67901871 74 8113152514 25 775970310 75 972108332 25 68664130 75 813873559 26 805117998 76 973098650 26 6793455325 76 81457709 27 813984844 77 974052195 79 770023190 77 8115235759 28 822350532 78 974970445 28 70620497 78 8116348095 29 83021836 79 975769110 29 712020561 79 816438095 20 830712098 76 973098650 26 6793455325 76 814567703 21 844791524 81 977527208 31 722687473 81 817568556 38 805117998 76 973098650 26 6793455325 76 814567703 31 844791524 81 977527208 31 722687473 81 817568556 33 859783587 83 979079461 33 773212247 83 818754348 31 85485804 84 97981341 47 73505843 84 819267363 31 8548698 99 99853488 44 97981344 34 775555843 84 819267363 31 8548698 998310756 37 774886957 90 822373910 32 9785684 99 9885966 37 74886957 90 822373910 34 990640965 93 98853488 44 77631084 93 82373910 34 990640965 93 98853488 44 779180849 99 82349942 34 99062244115 99 98880312 49 77888499 98 82379563 39 889776684 99 988540149 80 8788499 98 82379906 3	Years	10 per cent.	Years	10 per cent.	Years	12 per cent.	Years	12 per cent.
2 1169090154 52 934867365 2 1 163558913 52 7-87251644 3 2796514936 54 933223788 4 279915132 54 79000561 53 936847137 3 226278040 53 7-80010561 54 933223788 4 279915132 54 7900595738 5 349002844 55 941502300 5 326284103 55 7-92349068 6 395775949 56 943687362 6 366746092 56 793856830 7 437551561 57 945783394 7 402342448 57 7-99339597 8 475712093 58 947794560 8 4383439 58 7-0761346 9 509045730 59 949724794 9 462008989 59 7-98124978 2 593528347 60 951577809 2 487231210 60 7-99433226 2 955006034 12 509064799 61 800688668 12 593528347 62 955006034 12 509064799 61 800688668 12 593528347 62 955006034 12 509064799 61 800688668 12 593528347 62 955006034 12 509064799 61 800688668 12 593528347 62 955006034 12 509064799 61 800688668 12 593528347 62 955006034 12 509064799 61 800688668 12 593528347 62 955006034 12 509064799 61 800688668 12 593528347 62 955006034 12 509064799 61 800688668 12 593528347 62 955006034 12 509064799 61 800688668 12 593528347 62 955006034 12 509064799 61 800688668 12 59352834 63 956070709 13 549264727 63 803050742 5006034 12 50060364 18 603868668 66 8005254504 17 60923059775 67 8072308418 7-10142334 68 96400564 18 603352526 69 809097325 20 7-38764809 70 965301974 19 6033150526 69 809097325 20 7-38764809 70 965301974 19 6033150526 69 809097325 20 7738764809 70 96530876 12 605348514 71 810814513 2 775080815 73 970011108 23 67105650 73 8114054197 22 775070310 75 971079692 24 67901871 74 8131532514 279780310 75 971079692 24 67901871 74 8131532514 279780310 75 971079692 24 67901871 74 8131532514 279780310 77 974052195 27 700023190 77 815235759 27 813984844 77 974052195 27 700023190 77 815235759 28 813984844 77 974052195 27 700023190 77 815235759 28 813984844 77 974052195 27 700023190 77 815235759 28 813984844 77 974052195 27 700023190 77 815235759 28 813984844 77 974052195 27 700023190 77 815235759 28 813984844 77 974052195 27 700023190 77 815235759 28 813984844 77 9974052195 27 700023190 77 815235759 28 813984860 49 978502073 33 7740648945 88 81796203 39 883776684 89 98303358 39 77535869 9 8 812965653 39					1	0.89285714	51	7.85412900
3 2'37003790 53 9'36847137 3 2'26280a0 53 7'80010661 4 2'05014036 54 9'39223788 4 2'79915132 54 7'900595738 5 3'49062834 55 9'41502300 5 3'26284103 55 7'92349968 6 3'95775949 50 9'43687362 6 3'66746092 56 7'93856830 8 4'75112093 58 9'47794560 8 4'33883439 58 7'96761346 9 5'09045730 59 9'49724794 9 4'62008989 59 7'98124978 30 5'39836221 60 9'51577809 10 4'87231210 60 7'99433226 11 5'67885080 61 9'53357116 11 5'09964709 61 8'0688668 12 5'93528347 62 9'55066034 12 5'30549155 62 801893739 13 6'17049424 63 9'56707709 13 5'49264727 63 8'03697342 14 6'38688986 64 9'58285116 14 5'60345287 64 8'041850 15 6'5853753 65 9'59801076 15 5'81987222 65 8'0329721 16 6'77117613 66 9'61258266 16 5'9356866 66 8'05229121 16 6'77117613 66 9'61258266 16 5'9356866 66 8'05245404 17 6'94236503 67 9'62659226 17 6'09595775 67 8'07239848 18 7'10142334 68 9'64006364 18 6'21825423 68 8'08186901 19 7'24951169 69 9'65301974 19 6'33159526 68 8'0997325 20 7'38764809 70 9'65980876 22 6'6354967 72 8'11624197 72 9'68900876 22 6'643661862 70 8'09972697 22 7'51672922 71 9'67747209 21 6'5313150526 69 8'09097325 20 8'30517998 76 9'73098650 26 6'93455325 76 8'14567703 27 7'5080815 73 9'70011108 22 6'62549697 72 8'11624197 72 9'71079692 24 6'79011871 74 8'13152514 27 7'55709310 75 9'72108332 25 6'8644130 75 8'13873659 80 8'37722078 80 9'75769634 30 7'157057674 80 8'17094341 34 8'545885 79 9'75752108 33 7'226887473 81 8'176885 80 9'75706634 30 7'157057674 80 8'17094341 34 8'545885 79 9'75757208 31 7'17507674 80 8'17094341 34 8'0385804 89 9'83103558 39 7'158693 89 8'2156557 38 8'2497956 38 8'93772078 80 9'78572088 39 7'75856830 90 8'21977636 49 9'8363244 49 9'010102930 94 9'85843846 44 7'69955224 94 8'2347942 49 9'83633486 44 7'69955224 94 8'2347942 49 9'83633486 44 7'69955224 94 8'2347942 49 9'83633486 44 7'69955224 94 8'2347942 49 9'8363484 49 9'8363484 44 7'77186804 99 8'22475064 49 9'8363484 44 7'77186804 99 8'22477805 99 8'22477805 99 8'22477805 99 8'2247905 99 8'2247905 99 8'2247905 99 8'224909 99 8'2207408 99 8'2247080 99 8'2247080 99 8'2247080 99 8'	2	1.69090154	52	9:34367369	2			
4 296514936 54 939223788 4 279915132 54 7.90695738 6 3795775949 56 945687362 6 3766746092 56 7.93856830 7 4'37551561 57 945783394 7 402342448 57 7.95339597 8 475112093 58 947794560 8 4738384439 58 7.96501346 9 509045730 59 949724794 9 462008989 59 798124978 11 567885080 61 9753357116 11 509064799 61 80688668 12 5793528347 62 975066034 12 5730549155 62 801893739 13 6-17040424 63 975070709 13 5749264727 63 803050742 14 6-3868868 64 9758285116 14 5760345287 64 804161850 677117613 66 961248266 16 677117613 66 961248266 16 677117613 68 96360364 18 671042334 68 96400364 18 671825423 68 808186901 19 7-24951169 69 965301974 19 6-33150526 69 809972557 20 7738764809 70 96580286 12 673438514 71 810814512 27 63754799 72 96890876 22 66254969 72 811624197 72957169 72 966908876 22 66254969 72 811624197 729571098 72 97109692 24 679011871 74 8131452 27 63754799 72 96890876 22 66254969 72 811624197 729571098 76 973098650 26 693455325 76 81456702 88 82315255 28 822350532 78 974070445 28 82350532 78 974070445 28 82350532 78 974070445 28 82350532 78 974070445 28 82350532 78 974070445 28 8232350532 78 974070445 28 705021497 78 815878885 29 83251836 79 975769110 29 7712020561 79 816338075 80 8737722078 80 97576910 29 77268632 79 81634809 81 815878885 39 79099461 33 7732212247 83 818754348 38 8598533 88 9782492956 38 7715067674 88 818754348 39 88197566 37 744886945 86 822375933 88 81976094 87 981859566 37 744886945 86 822375930 99 81859566 37 744886945 86 822375930 99 881859566 37 744886945 86 822375930 99 81859566 37 744886945 86 822375930 99 81859560 37 744886945 86 822375930 99 81859560 37 744886945 86 822375930 99 81859560 37 744886945 86 822375930 99 822575042 49 972023399 99 9848584846 44 769955228 99 823477049 99 8826601 99 988730214 49 778488694 99 82247506 99 88334766 44 77938390 99 82237590 99 822477805 99 822477805 99 822477805 99 822477805 99 822477805 99 822477805 99 82247909 99 82247060 99 82244706 99 88330212 49 77848803 99 82247062 99 82247062 99 82247062 99 82247062 99 82247062 99 82247062 99 82247062 99 82247062 99 8	3 l	2.37003790	53	9.36847137				
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42 9°02541115 92 9'84807125 42 7'64536068 92 8'22755942 43 9°06409655 93 9'85334887 43 7'67310184 93 8'23124275 44 9'10102930 94 9'85843846 44 7'69955228 94 8'23479422 45 9'13630545 95 9'86834706 45 7'72478546 95 8'23821883 46 9'17001450 96 9'86808139 46 7'74886957 96 8'24152132 47 9'20223993 97 9.87264791 47 7'77186804 97 8'24470627 48 9'23305977 98 9'87705284 48 7'79383996 98 8'24777805 49 9'26254691 99 9'88130212 49 7'81484039 99 8'25074086	20	8.94236164	90	9.83692241	10	7:58568320	90	
42 9'02541115 92 9'84807125 42 7'64536068 92 8'22755942 43 9'06409655 93 9'85334887 43 7'67310184 93 8'23124275 44 9'10102930 94 9'85843846 44 7'69955228 94 8'23479422 45 9'13630545 95 9'86334706 45 7'72478546 95 8'23821883 46 9'17001450 96 9'86808139 46 7'74886957 96 8'24152132 47 9'20223993 97 9.87264791 47 7'77186804 97 8'241470627 48 9'23305977 98 9'87705284 48 7'79383996 98 8'24777805 49 9'26254691 99 9'88130212 49 7'81484039 99 8'25074086	- 1		91	9.84259831	41	7.61624963	91	8-22373010
43 9'06409655 93 9'85334887 43 7'67310184 93 8'23124275 44 9'10102930 94 9'85843846 44 7'69955228 94 8'23479422 45 9'13630545 95 9'86334706 45 7'72478546 95 8'23821883 46 9'17001450 96 9'86808139 46 7'74886957 96 8'24152132 47 9'20223993 97 9.87264791 47 7'77186804 97 8'24470627 48 9'23305977 98 9'87705284 48 7'79383996 98 8'24777805 49 9'26254691 99 9'88130212 49 7'81484039 99 8'25074086	42		92	9.84807125	42			8.22755042
44 9'10102930 94 9'85843846 44 7'69955228 94 8'23479422 45 9'13630545 95 9'86334706 45 7'72478546 95 8'23821883 46 9'17001450 96 9'86808139 46 7'74886957 96 8'24152132 47 9'20223993 97 9.87264791 47 7'77186804 97 8'21470627 48 9'23305977 98 9'87705284 48 7'79383996 98 8'24777805 49 9'26254691 99 9'88130212 49 7'81484039 99 8'25074086	43	9.06409655						8.23124275
45 9:13630545 95 9:86334706 45 7:72478546 95 8:23821883 46 9:17001450 96 9:86808139 46 7:74886957 96 8:24152132 47 9:20223993 97 9.87264791 47 7:77186804 97 8:24470627 48 9:23305977 98 9:87705284 48 7:79383996 98 8:24777805 49 9:26254691 99 9:88130212 49 7:81484039 99 8:25074086			1					8.53420422
46 9.17001450 96 9.86808139 46 7.74886957 96 8.24152132 47 9.20223993 97 9.87264791 47 7.77186804 97 8.21470627 48 9.23305977 98 9.87705284 48 7.79383996 98 8.24777805 49 9.26254691 99 9.88130212 49 7.81484039 99 8.25074086								
47 9.20223993 97 9.87264791 47 7.77186804 97 8.21470627 48 9.23305977 98 9.87705284 48 7.79383996 98 8.24777805 49 9.26254691 99 9.88130212 49 7.81484039 99 8.25074086		, , , , , ,						
48 9'23305977 98 9'87705284 48 7'79383996 98 8'24777805 49 9'26254691 99 9'88130212 49 7'81484039 99 8'25074086							1 - 1	
49 9'26254691 99 9'88130212 49 7'81484039 99 8'25074086							1 27	
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7								
900540149 50 7.83492075 100 8.25359874				9'00130212				
	30	9 290/0903	1200	9.00540149	11 20	7.83492075	100	8.25359874

Present Value of £1 per Annum in n years; Redemption of Capital being at 3½ per cent. with interest allowed to a Purchaser at the following rates per cent.

rears.	15 per cont.	Years	15 per cent.	Years	18 per cent.	Years	18 per cent.
1	0.86956522	51	6,35640769	1	0.84745763	51	5.33841368
2	1.55908830	52	6.36844166	2	1 48942399	52	5.34689919
3	2.11893955	53	6.37995165	3	1 99229309	53	5.35501042
4	2.58230357	54	6.39096480	4	2.39663815	54	5.36276712
7	2.07103271	55	6.40120642		2.72865164	55	5.37018772
5			6.41160046	5 6	300599809	33	5,3728920
-	3.30394790	56		13 1		1 - 1	
7 8	3.59009071	57	6.42126910	7 8	3.24102365	57	5.38408864
- 1	3.83911577	58	6.43053334	H - I	3.44261755	58	5,39060029
9	4°05768395	59	6.43941290	9	361734292	59	5.39683871
.0	4.25095301	60	6·447926 30	10	3.77015097	60	5.40281727
11	4.42297893	61	6.45609101	111	3.90484722	61	5.40854856
12	4.57699526	62	6.46392347	12	4'02440481	62	5.41404441
13	4.71561154	63	6.47143920	13	413118030	63	5.41931598
14	4.84095693	64	6.47865286	14	4.22706565	64	5.42437381
15	4 95478586	65	6.48557826	15	4'31359733	65	5.42922781
ı 6	5.05855708	66	6.49222850	16	4.39203612	66	5.43388739
17	5.12349341	67	6.49861595	17	4.46342627	67	5.43836131
18	5.24062759	68	6.2047233	18	4.52864010	68	5.44265805
19	5.32083787	69	6.21064871	19	4.58841198	69	5.44678550
0	5.39487587	70	6.21631264	20	4.64336460	70	5.45075116
-					4 04330400		3 43-7 3 3
21	5.46338859	71	6.52176308	21	4.69402939	71	5.45456221
22	5.2693603	72	6.2700020	22	4.74086269	72	5.45822532
23	5.28600236	73	6.53203690	23	4.78425854	73	5.46174693
24	5.64102236	74	6.53688082	24	4.82455091	74	5'46513316
25	5.69236084	75	6.54154037	25	4.86206243	25	5.4683896
26	5.24035031	76	6.24602329	26	4.89703024	76	5.47152198
27	5.78528236	1 ' 1	6.22033692	27	4 9 2 9 6 9 2 4 7		
28	5.82741600	77	6.55448827	28		77 78	5:47453539
1	5.86698205			11 1	4.96025238		5'47743481
29	5 904 1 8692	79	6·55809691 6·56233048	29 30	4°93889018 5°01576627	79	5.47995469 5.48291038
						1	_
31	5.93921570	81	6.56603376	31	5.04102386	81	5.48549533
32	5.97223491	82	6.26929960	32	5'06479122	82	5 °48798 39 0
33 I	600339473	83	6.57303354	33	508718359	83	5'49037999
34	6.03283097	84	6·57634084	34	5.10830479	84	5:49268732
35	6.05066677	85	6.57952652	35	5.12824859	85	5.49490945
36	6.03701401	86	6.58259539	36	5.14709993	86	5.49704970
37	6.11197460	87	6.58555203	37	5.16493589	87	5'49911149
38	6-13564156	88	6.58840085	38	5.18182663	88	5.20100223
39	6.12803336	89	6.59114603	39	5.19783612	89	5.20301146
10	6.17942776	90	6.59379159	20	5.51305585	90	5.2018222
41	6.19969654	91	6.59634138	41	5.22744024	91	5.20663251
	6.21897213	92	6.59879908	42	5·25363428	1 - 1	
42		, ,	6.60116821	n · (92	5.20834218
43	6.23731520	93		43	5.25415959	93	5.20999591
44	6.25478172	94	6.60345214	44	5.26654840	94	5'51158709
45	6.27142344	95	6.60565411	45	5.27834192	95	5.21312100
46	6.28728827	96	6.60777722	46	5.58957566	96	5*51459981
47	6.30242060	97	6.60982444	47	5.30028234	97	5.21602261
48	6.31686169	98	661179862	48	5.31049233	98	5.21240041
49	6.33064985	99	6.61 370250	49	5.32023374	99	5.2012
60	6.34382076	100	6.61553869	50	5.32953275	100	5.2200457

TABLE VIII.

Present Value of £1 per Annum in n years; Redemption of Capital being at 3½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	20 per cent.	Year	20 per cent.	Years	25 per cent.	Years	25 per cent.
	0.83333333	51	4.82342493	1	0.80000000	51	3.88618810
2	1.44633973	52	4.83035117	2	1.34879867	52	3.89068293
3	191595040	53	4.83696994	3	1.74845294	53	3.89497588
4	2.58401210	54	4.84329758	4	2.05232973	54	3.89907786
	2.58744682	55	4.84934939		2.29104851	55	3.90299908
5		56	4.85513967	5 6	248343420	56	3 90674906
	2.83552635		4.86086180		2.64169739	57	3.91033669
7 8	3.04372777	57		7 8	2.77410481	38	3.91377030
	3.22085416	58	4.86598833	<i>1</i> 1 1			
9	3.37329558	59	4.87107102	9	2.88645268	59	3.91705771
10	3.20280282	60	4.87594092	10	2798292543	60	3 ⁹ 2020622
11	362198153	61	4.88060840	11	306661956	61	3.92322272
12	3.72461744	62	4.88508325	12	3.13987566	62	3 92611365
13	3.81589712	63	4.88937466	13	3.20449580	63	3.92888510
14	3.89756074	64	4.89349129	14	3.26189002	64	3.93154277
15	3.0710102	65	4.89744132	15	3.31317740	65	3.93409206
16	403738896	66	4.90123245	16	3:35925750	66	3 9 3 6 5 3 8 0 5
17	409763632	67	4 90487199	17	3.40086162	67	3.93888552
18	4.15253351	68	4 908 36680	18	3.43859041	68	3.94113901
19	4.5052 3444	69	4.91172342	19	3.47294183	69	3.94330279
20	4.24879089	70	4.91494801	2ó	3.50433216	7Ó	3.94538091
21	4.50117167	71	4.01804641	21	3.53311214	71	3 947 37720
22	4.33027765	72	4.92102415	22	3.55957931	72	3.94929528
23	4.36645368	73	4.92388649	23	3.58398783	73	3.95113859
24	4.39999801	74	4.92663841	24	3 60655604	74	3.95291040
					3.62747256	75	3.95461.379
25	4.43116993	75	4.92928465	25		76	
26	4.46019595	76	4 93182969	26	3.64690124	1 ' 1	3.95625171
27	4.48727478	77	4.93427782	27	3.66498503	77	3.95782693
28	4.21228121	78	4.93663309	28	3.68184927	78	3.95934212
29	4.53627102	79	4.93867985	29	3.69760427	79	3.96065861
30	4.55848079	80	4.94108037	30	3.71234754	80	3.96220235
31	4.57933329	81	4.94317956	31	3.72616558	81	3.96355208
32	4.59893800	82	4.94520030	32	3.73913541	82	3.96485115
33	461739307	83	4.947 14578	33	3.75132578	83	3.96610163
34	4.63478672	84	4.94901904	34	3.76279834	84	3.96730551
35	4.65119854	85	4.95082297	35	3·77 3 60844	85	3.96846467
36	4.66670045	86	4.95256034	36	3.78380600	86	3.96958090
37	4.68135765	87	4.95423381	37	3.79343609	87	3 97065592
38	4 69522934	88	4.95584589	38	3.80253957	88	3·97 169 13 7
39	4.70836947	89	4.95739899	39	3.81115352	89	3.97268882
10	4.72082722	90	4.95889544	40	3.81931169	90	3.97364976
41	4:73264759	91	4.96033743	41	3.82704486	91	3.97457562
42	4.74387180	92	4.96172708	42	3.83438117	92	3 [.] 9754677 7
43	4.75453769	93	4.96306640	43	3.84134638	93	3.97632752
44	4.76468004	94	4.96435733	44	3.84796414	94	3.97715613
	4.77433090	95	4.96560173	45	3.85425618	95	3.97795478
45 46	4.78351985	96	4.96680137	46	3.86024252	96	3.97872462
		1 - 1	4.96795795	47	3.86594160	97	3 9 7 9 4 6 6 7 7
47	479227422	97		48	3.87137049	98	3.98018226
48	4.80061929	98	4.96907309	11 ' 1	3.87654407	1 1	
	4.80857851	99	4.97014836	49	3.87654497	99	3.98087211
49 50	4.81617365	100	4.97118527	50	3.88147965	100	3.98153729

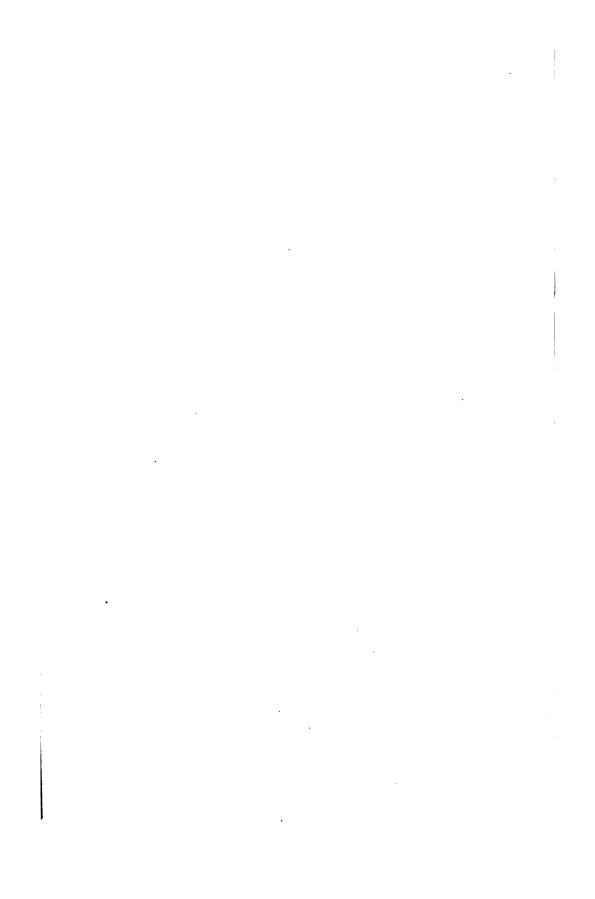


TABLE IX.

FOR

VALUING MINERAL AND OTHER PROPERTIES.

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Present Value of £1 per Annum in n years; Redemption of Capital being at 4 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	5 per cent.	Years	5 per cent.	Years	6 per cent.	Years	6 per cent.	_
1	0.95238095	51	17.77498127	1	0.94339623	51	15.09232358	_
2	×1.85117967	52	17.86284506	2	1.17753386/4	52	15.15562012	
3	2.70015916	53	17:94715260	3	2.62916745	53	15.51656610	
4	3.50274910	54	1802805444	4	3.38420876	54	15.27438076	
5	4.26208201	55	18.10569440	5	4.08785431		15.33007743	
5	4.98102472	56	18.18020966	5	4.74469052	55 56	15.38346370	
7	5.66220597	57	18.25173113	7	5.35878077	57	15.43464181	
7 8	6.30804060	58	18.32038400	7 8	5.93373800	58	15.48370905	
9	6.92075084	59	18.38628770	9	6.47278548	59	15.53075788	
16	7.50238514	60	18.44955639	1ó	6.97880808	60	15.57587633	
11	8-05483478	61	18.51029920	11	7.45439554	61	15-61914821	
12	8.57984864	62	18.56862064	12	7.90187935	62	15.66065333	
13	9.07904626	63	18.62462018	13	8.32336418	63	15.70046770	
14	9.55392960	64	18.67839328	14	8.72075482	64	15.73866376	
15	1000589343	65	18.73003124	15	9.09577943	65	15.77531063	
16	10.43623469	66	18.77962133	16	9.45000952	66	15.81047415	
37	10.84616084	67	18.82724705	17	9.78487731	67	15.84421714	
18	11.23679741	68	18.87298835	18	10.10169082	68	15.87659957	
19	11.60919479	69	18.92050099	19	10.40164729	69	15.01020962	
20	11.96433427	70	18.95912065	20	10.68584416	70	15.93750907	
21	12.30313365	71	18-99965508	21	10.95528971	71	15 966 142 98	
-22	12.62645216	72	1903859225	-22	11.21091175	72	15.99363021	
23	12.93509507	73	19.07599657	23	11.45356549	73	16.02001840	
24	13.22981771	74	19 11192967	24	11.68404046	74	16.04535307	
25	13.21132927	75	19 14645065	25	11.90306673	75	16.06967773	
-26	13.78029623	76	19.17961612	26	12.11132040	76	1609303398	
27	14.03735130	77	19.21148035	27	12.30943295	77	16.11246160	
28	14'28306677	78	19.24209535	28	12.49797295	78	16.13699867	
29	14.21801619	79	19.27151098	29	12.67749536	79	16.15768159	
-30	14.74271766	80	19.29977501	30	12.84849963	80	16.17754519	
31	1495766552	81	19:32693332	31	13.01145553	81	16.19662282	
32	15.16332653	82	19:35302987	-32	13.16680143	82	16.21494644	
33	15.36014159	83	19.37810679	33	13'31494690	83	16.23254657	
34	15.54852760	84	19.40220446	34	13.45627497	84	16.24945246	
35	15.72887882	85	19.42536178	35	13.59114421	85	16.26569222	
36	15.90156852	86	19.44761583	-36	13.71989070	86	16.28129259	
37	16.06695021	87	19.46900238	37	13.84282966	87	16.29627936	
37 -38	16.22535878	88	19.48955571	-38	13.96025699	88	16.31067719	
39	16.37711185	89	19.50930858	39	14.07245083	89	16.32450962	
40	16.52251070	90	19.22829260	20	14.17967275	90	16.33779934	
41	16-66184125	91	19.54653802	41	14.28216894	91	16.35056802	
42	16.79537502	92	19.56407393	42	14.38017133	92	16.36283650	
43	16.92336996	93	19.28092819	43	14.47389855	93	16.37462468	
44	17.04607118	94	19.59712748	44	14.56355690	94	16.38595163	
45	17.16371179	95	19.61269758	45	14.64934110	95	16.39683577	
46	17.27651354	96	19.62766315	46	14.73143515	96	16.40729462	
47	17.38468743		19.64204787	47	14.81001296	97	16.41734509	
48	17.48843432	97 98	19 65 58 74 50	48	14.88523906	98	16.42700334	
	17:58794553	99	19.66916480	49	14.95726917	99	16.43628485	
49	17.68340320	100		50		100		
-9U	1/ 00340320	1200	1 19 00133303	100	., 020230/0	1200	->/442-~43/	

Present Value of £1 per Annum in n year-; Redemption of Capital being at 4 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	8 per cent.	Years	8 per cent.	Years	10 per cent.	Years	10 per cent.
1	0.92592593	51	11.59301339	1	0.00000000	51	9.41098085
2	1.75378267	52	11.63032451	2	1.69435216	52	9.43555353
3	2.49782353	53	11-66600528	3	2.37897817	53	9.45902465
4	3 16967212	54	11.70013456	4	2.08071437	54	9.48144979
5 1	377890227	55	11.73278682		3.51336873	55	9.50288123
5	4.33347094	56	11.74603239	5 6	3.98784660	56	9.52336817
7	4.84004587	57	11.79393772	7	4.41287548	57	9.54295693
7	5.30425662	58	11.82256569	7 8	4.79552293	58	9.56169124
9	5.73088916	59	11.84997578	9	5.14157341	59	9.57961231
10	6.12403832	60	11.87562431	10	5.45580691	60	9.59675905
36 II	6.48722823	61	11-90136464	11	5.74220796	61	961316823
12	6.82350853	62	11 92544738	12	600412462	62	9.62887463
13	7.13553161	63	11.94852050	13	6.24439067	63	964391111
14	7.42561540	64	11.97062950	14	6.46542083	64	9.65830879
15	7.69579446	65	11.99181766	15	6.66928545	65	9.67209715
16	7 94786208	66	12.01212600	16	6.85776989	66	9.68530413
17	8-18340503	67	1203159353	17	703242189	67	9.69795619
18	8.40383251	68	1205025735	18	7.19458993	68	9.71007847
19	8.61040035	69	1206960933	19	7:34545430	69	9.72264000
20	8.80423129	70	12'08531327	20	7.48605253	70	9.73282781
21	898633225	71	12.10177089	21	7.61730040	71	9.74349904
- 22	9.15760886	72	12.11755601	-22	7.74000930	72	975372889
23	9.31887792	73	12.13269762	23	7.85490070	73	9.76353682
24	9.47087802	74	12.14722333	24	7.96261829	74	9.77294132
25	961427862	75	12.16115946	25	806373819	75	0.78195997
26	9.74968840	76	12.17453115	26	8.15877761	76	979060952
27	9.87766408	77	12.18736224	27	8.24820426	77	9.79890592
28	999870265	78	12.19962262	28	8.33243238	78	9.80686438
29	10.11352233	79	12.51140351	29	8.41184853	79	9.81449937
30	10.55180500	80	12.22283566	30	8.48679588	80	9.82182468
31	10.32467463	81	12.23372291	31	8.55758833	81	9.82885351
32	10.42224803	82	12.24417394	32	862451197	82	9.83559840
	10.51485277	83	12.25420689	33	8 68782810	83	9.84207133
33 - 34	10.60279301	84	12.26383906	34	8.74777587	84	9.84828373
35	10.68634979	85	12.27308708	35	8.80457453	85	9.85424656
- 36	10.76578330	86	12.28196671	36	8.85842551	86	9.85997020
37	10.84133467	87	12.29049316	37	8.90951418	87	9.86546465
38	10.91322772	88	12.29868090	38	8.95801137	88	9.87073942
39	10.98167047	89	12.30654377	39	900407482	89	9.87580359
40	11.04685654	90	12.31409506	10	904785043	90	9.88066588
41	11'10896627	91	12.32134743	41	908947324	91	9.88533460
42	11.16816795	92	12.32831307	42	9.12906854	92	9.88981770
43	11.22461870	93	12.33500359	43	9.16675264	93	9.89412279
44	11.27846544	94	12.34143010	44	9.20263372	94	9.89825713
45	11.32984563	95	12.34760330	45	9.23681245	95	9.90222771
46	11.37888810	96	12.35353338	46	9.26938273	96	9.90604118
47	11.42571362	97	12.35923016	47	9.30043214	97	9.90970393
48	11.47043555	98	12.36470299	48	9:33004253	98	9.91322206
49	11.21316039	99	12.36996084	49	9:35829042	99	991660142
~50	11.55398826	100		150	9.38524748	100	

Present Value of £1 per Annum in n years; Redemption of Capital being at 4 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	12 per cent.	Years	12 per cent.	Years	15 per cent.	Years	15 per cent.
1	0.89285714	51	7.92023690	1	0.86956522	51	6.39963754
2	1.63881748	52	7.93763410	2	1.56202144	52	6.41099106
3	2.27092839	.53	7.95423799	3	2.12608293	53	6.42181794
4	2.81301829	54	7.97008969	4	2.59410071	54	6:43214622
5	3.28270189	55	7.98522780	1 5 1	2.98840091	55	6.44200216
5	3.69328178	56	7:99968858	5 6	3.32488920	56	6.45141036
7	405499198	57	8.01350607		3.61520336	57	6.46039390
7 8	4.37583462	38	8 0267 1234	7 8	3.86805549	38	6.46897443
9	4.66215697	59	8 0 3 9 3 3 7 5 7	9	4.09009677	59	6.47717232
10	4.91905827	60	8.05141018	10	4.58649300	60	6.48500671
11	5.15068220	61	806295699	11	4.46131736	61	6.49249561
12	5:36043073	62	807400332	12	4.61782475	62	6.49965600
13	5.55112305	63	8.08457304	13	4.75864786	63	6.50650386
14	5.72511524	64	8009468872	14	4.88593842	64	6.21302431
15	5.88439170	65	8.10437174	15	5 00147292	65	6.51932157
16	603063566	66	8·11364227	16	5·10673069	66	6.52531912
17	6.16528429	67	8.12251944	17	5.20295364	67	6.53105967
18	6.28957209	68	8.13102136	18	5.29119207	68	6.53655525
19	6.40456544	69	8.13982771	19	5.37234029	69	6.54224524
20	6.21119028	70	8-14696723	20	5.44716454	70	6.54685647
21	6.61025452	71	8.15444290	21	5.51632512	71	6.55168313
22	6.70246628	72	8.16160687	22	5.58039417	72	6.55630689
23	6.78844887	73	8·16847307	23	5.63986983	73	6.56073697
24	6.86875311	74	8.17505472	24	5.69518792	74	6.56498208
25	6.94381937	75	8·18136439	25	5.74673134	75	6.56905051
26	7.01422721	76	8.18741404	26	5.79483792	76	6.57295012
27	7:08022193	77	8-19321505	27	5.83980786	77	6.57668838
28	7.14219520	78	8.19877825	28	5.88190401	78	6.58027242
29	7.20046424	79	8·20411394	29	5.92136659	79	6.58370898
30	7.25530930	80	8.20923195	30	5.95846777	80	6.58700451
31	7.30698495	8r	8.21414161	31	5.99324994	81	6.29016213
32	7:35572176	82	8.21885187	32	6.02596263	82	6.59319667
33	7:4017291 0	83	8.22337104	33	605680435	83	6.29610469
34	7:44519749	84	8.23777104	34	6.0828011	84	6.59889448
35	7:48630068	85	8.23186919	35	6.11331684	85	6.60157110
36	7.52519748	86	823586294	36	6.13922995	86	6.60413934
37	7.56203332	87	8.23969605	37	6.16372459	87	6.60660382
38	7.59694158	88	8.24337524	38	6.18689678	88	6.60896892
39	7.63004492	89	8.24690693	39	6.20883436	89	6.61123880
40	7.66145623	90	8.25029727	40	6.22961789	90	6 ⁻⁶ 134174 7
41	7.69127963	91	825355211	41	6.24926130	91	6.61550873
42	7.71961132	92	8.25667708	42	6.26801267	92	6.61751624
- 43	7.74654027	93	8.25967752	43	6.28575471	93	6.61944347
44	7.77214892	94	8.26255855	44	6.30260531	94	6.62129373
45	7:79651375	95	8.26532509	45	6.31861799	95	6.62307023
46	7.81970581	96	8.26798181	46	6.33384231	96	6.62477599
47	7.84179120	97	8.27053322	47	6.34832421	97	6.62641392
48	7.86283148		8.27298359	48	6.36210637	98	6.62798681
49	7.88288405	99	8.27533704	49	6.37522845	99	6.62949730
50	7.90200250	100	8.27759751	50	6.38772737	100	6.63094796

Present Value of £1 per Annum in n years; Redemption of Capital being at 4 per cent. with interest allowed to a Purchaser at the following rates per cent.

1 0.86206897 51 6.01471742 1 1.49210064 2 1.53799759 52 6.02474519 2 1.49210064 3 2.08182167 53 6.03430581 3 1.99860681 4 2.52850855 54 6.04342433 4 2.40679653 5 2.90168425 55 6.05212419 5 2.74252781 6 3.21789766 56 6.06042733 6 3.02332280 7 3.48906651 57 6.06835430 7 3.26147635 8 3.72400876 58 6.07592443 8 3.46587015 9 3.92938127 59 6.08315584 9 3.64308025 10 4.11030506 60 6.090006555 10 3.79807974 11 4.27078413 61 6.09666960 11 3.93469911 12 4.41399430 62 6.10298309 12 4.05593668 13 4.54248690 63 6.10902023 13 4.16417289 14 4.68333504 64 6.11479442 14 4.26132175 15 4.76324073 65 6.12031834 15 4.34893979 16 4.88861434 66 6.12560392 16 4.42830575 17 4.94563457 67 6.13060244 17 4.50047998 18 5.02529411 68 6.13550460 18 4.56634916 19 5.09843502 69 6.14051752 19 4.62666046 20 5.16577621 70 6.14883119 21 4.73305330 21 5.22793522 71 6.14883119 21 4.73305330 22 5.28544547 72 6.15290365 22 4.78014189 23 5.33877014 73 6.15680518 23 4.82371593 24 5.38831335 74 6.16054351 24 4.86412478 25 5.43442929 75 6.16412596 25 4.790167334 26 5.47742974 76 6.16755951 26 4.93662898 27 5.51759114 77 6.17685076 27 4.90622779 28 5.55515512 78 6.17400600 28 4.99967564 29 5.59034195 79 6.17703122 29 5.02815935 30 5.62334501 30 6.18794158 33 5.12548293 31 5.65433834 81 6.18271406 31 5.07987204 32 5.68347835 82 6.18538225 32 5.10337942 33 5.71090595 83 6.18794158 33 5.12548293 34 5.73674848 84 6.19039673 34 5.14628915 35 5.76112125 85 6.19275216 35 5.16589437 36 5.78412897 86 6.19501211 36 5.18438584 37 5.80586695 87 6.19718065 37 5.20184280 38 5.82642206 88 6.19926164 38 5.21833735 39 5.84587375 89 6.20125877 39 5.23393525	Ī.	- l
2 1:53799759 52 602474519 2 1:49210064 3 208182167 53 603430581 3 199860681 4 2:52850865 54 604342433 4 2:40679653 5 2:90168425 55 605212419 5 2:74252781 6 3:21789766 56 605042733 6 302332280 7 3:48906651 57 606835430 7 3:26147635 8 3:72400876 58 607592443 8 3:46587015 9 3:92938127 59 608315584 9 3:64308025 10 4:11030506 60 609006555 10 3:79807974 11 4:27078413 61 609066960 11 3:93469911 12 4:41399430 62 6:10298309 12 4:05593668 13 4:54248690 63 6:10902023 13 4:16417289 14 4:65833504 64 6:11479442 14 4:26132175 15 4:76324073 65 6:123631834 15 4:34893979 16 4:85861434 66 6:12560392 16 4:42830575 17 4:94563457 67 6:13066244 17 4:50047998 18 5:02529411 68 6:13550460 18 4:5634916 68 6:14051752 19 4:62666046 20 5:16577621 70 6:14883119 21 4:73305330 21 5:22793522 71 6:14883119 21 4:73305330 22 5:28544547 72 6:15290365 22 4:78014189 23 5:33877014 73 6:15680518 23 4:82371593 24 5:33877014 73 6:16680518 23 4:82371593 24 5:3387014 73 6:16580518 23 4:82371593 25 5:43442929 75 6:16412596 25 4:90167334 26 5:47742974 76 6:16755951 26 4:93662898 27 5:51559114 77 6:17085076 27 4:96522779 28 5:55515512 78 6:17400600 28 4:99967564 29 5:59034195 79 6:17703122 29 5:02815935 30 5:762334501 80 6:18794158 33 5:12548293 33 5:71090595 83 6:18794158 33 5:12548293 34 5:73674848 84 6:19039673 34 5:14028915 35 5:76112125 85 6:19275216 35 5:1689437 37 5:80586695 87 6:19718065 37 5:20184280 38 5:82642206 88 6:19906164 38 5:21837353 39 5:84587375 80 6:2015757 10 5:24869665 41 5:8875374 91 6:2001540 41 5:26267660 41 5:8875374 91 6:2001540 41 5:26267660 41 5:8875374 91 6:2001540 41 5:26267660 41 5:8875375 90 6:2015757 40 5:22889665	Ye	Years 18 per cent.
3 2-08182167 53 6-03430581 3 1-99860681 4 2-52850865 54 6-04342433 4 2-40679653 5 2-90168425 55 6-05212419 5 2-74252781 6 3-21789766 56 6-0542733 6 3-02332280 7 3-48906651 57 6-06835430 7 3-26147635 8 3-72400876 58 6-07592443 8 3-46587015 9 3-92938127 59 6-08315584 9 3-64308025 10 4-11030506 60 6-09006555 10 3-79807974 11 4-27078413 61 6-09666960 11 3-93469011 12 4-41399430 62 6-10298309 12 4-05593668 13 4-54248690 63 6-10902023 13 4-16417289 14 4-65833504 64 6-11479442 14 4-26132175 15 4-76324073 65 6-12031834 15 4-34893979 16 4-85861434 66 6-12560392 16 4-42830575 17 4-94563457 67 6-13066244 17 4-5047998 18 5-02529411 68 6-13550460 18 4-56634916 19 5-09843502 69 6-14051752 19 4-62666046 19 5-09843502 69 6-14051752 19 4-6266046 19 5-09843502 69 6-14051752 19 4-6266046 20 5-16577621 70 6-14883119 21 4-73305330 21 5-22793522 71 6-14883119 21 4-73305330 22 5-28544547 72 6-1520365 22 4-78014189 23 5-33877014 73 6-15680518 23 4-82371593 24 5-38831335 74 6-16054351 24 4-86412478 25 5-43442929 75 6-16412596 25 4-90167334 25 5-34342929 75 6-16412596 25 4-90167334 26 5-47742974 76 6-16755951 26 4-93662898 27 5-517559114 77 6-16755951 26 4-93662898 28 5-55515512 78 6-17400600 28 4-99967564 29 5-550334501 80 6-17903210 30 5-05484254 31 5-65433834 81 6-18271406 31 5-07087204 33 5-71090595 83 6-19572210 35 5-164828915 34 5-73674848 84 6-19903673 34 5-14628915 35 5-76112125 85 6-19275216 35 5-1689437 36 5-78412897 86 6-19501211 36 5-1843884 37 5-8586695 87 6-19718065 37 5-2184280 38 5-82642206 88 6-199026164 38 5-21833735 39 5-84587375 89 6-20215877 39 5-23393525 40 5-86429473 90 6-20317557 40 5-28869665 41 5-88175174 91 6-2050540 41 5-26267660 41 5-88175174 91 6-2050540 41 5-26267660 41 5-88175174 91 6-2050540 41 5-26267660 41 5-88175174 91 6-2050540 41 5-26267660 41 5-88175174 91 6-2050540 41 5-26267660 41 5-88175174 91 6-2050540 41 5-26267660 41 5-88175174 91 6-2050540 41 5-26267660 41 5-88175174 91 6-2050540 41 5-26267660 41 5-88175174 91 6-2050540 41 5-26267660 41 5-88175174 91 6-2050540 41 5-26267660 41 5-8818500 99	4 5	51 5.36887241
4 2:52850865 54 6v34342433 4 2:40679653 5 2:90168425 55 6v56212419 5 274252781 6 3:21789766 56 6v5642733 6 3:2332280 7 3:48906651 57 6v6835430 7 3:26147635 8 3:72400876 58 6v7592443 8 3:46587015 9 3:92938127 59 6v8315584 9 3:64308025 10 4:11030506 60 6v9006555 10 3:79807974 11 4:27078413 61 6v9666960 11 3:93469911 12 4:41399430 62 6:10298309 12 4:05593668 113 4:54248690 63 6:10902023 13 4:16417289 114 4:65833504 64 6:11479442 14 4:26132175 15 4:76324073 65 6:12563392 16 4:34893979 16 4:85861434 66 6:12560392 16 4:42830575 17 4:94563457 67 6:13066244 17 4:50047998 18 5:02529411 68 6:13550460 18 4:56634916 68 6:13550460 18 4:56634916 68 6:13550460 18 4:56634916 68 6:13550460 18 4:56634916 19 5:09843502 69 6:14051752 19 4:62666046 20 5:16577621 70 6:1487966 20 4:82371593 22 5:28544547 72 6:15290365 22 4:78014189 22 5:28544547 72 6:15290365 22 4:78014189 22 5:43442929 75 6:16412596 25 4:78014189 25 5:43442929 75 6:16412596 25 4:99167334 27 5:51759114 77 6:17085076 27 4:99622779 28 5:55515512 78 6:17400600 28 4:99967564 29 5:59034195 79 6:17703122 29 5:59034195 79 6:17703122 29 5:59034195 79 6:17703122 30 5:05484254 33 5:71090595 83 6:18593825 32 5:10337942 33 5:71090595 83 6:18593825 32 5:10337942 33 5:71090595 83 6:18593825 32 5:10337942 33 5:7848287 86 6:19501211 36 5:848838 35 5:2642206 88 6:19501211 36 5:848838 35 5:82642206 88 6:19501211 36 5:1848838 35 5:2642807 30 6:20317557 20 5:24869665 37 5:20184280 33 5:84887375 89 6:20125877 39 5:2334521 30 5:2548293 34 5:73674848 84 6:19039673 34 5:14628915 35 5:6580437 35 5:6580437 39 5:84887375 89 6:20125877 39 5:2334501 80 6:19501211 36 5:14838735 89 6:20125877 39 5:2334526 40 5:2016448 44 5:92892836 94 6:20106448 44 5:30041228 93 6:20166715 45 5:311733354 46 5:92656300 96 6:21316756 45 5:311733354 46 5:92656300 96 6:21316756 45 5:311733354 46 5:92656300 96 6:21316756 45 5:311733354 46 5:935656300 96 6:21316756 45 5:311733354 46 5:935656300 96 6:21316756 45 5:311733354 46 5:935656300 96 6:21316756 45 5:311733354 5:311733354 46 5:935656300 96 6:21316756 45 5:31173335	4 5	52 5.37686085
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44 5.92892836 94 6.21010448 44 5.30041298 45 5.94309643 95 6.21166715 45 5.31173354 46 5.95656300 96 6.21316756 46 5.32248827		93 5.2272291
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48 5.98155357 98 6.51599170 48 5.34243263	, 2	
49 5.99315136 99 6.51732023 49 5.35168250		
		99 5:52971949 100 5:53072873

Present Value of £1 per Annum in n years; Redemption of Capital being at 4 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	20 per cent.	Years	20 per cent.	Years	25 per cent.	Years	25 per cent.
1	0.83333333	51	4.84827682	1	0.80000000	51	3.90230426
2	1.44886364	52	4.85479022	2	1.35099338	52	3.90652279
3	1.92178881	53	4.86099628	3	1.75331386	53	3.01024021
4	2.29626374	54	4.86691180	4	205977447	54	391436769
اخا	2.59992072	55	4.87255248		2.30082286	55	3.91801564
5	2.85093675	56	4.87793299	5 6	2.49524716	56	3.92149379
7	306175925	57	4.88306706		2.65526946	57	3.92481124
7 8	3.24119867	58	4.88796757	7 8	2.78918374	58	3.92797649
9	3.39566653	59	4.89264657	9	2.90281666	59	3.93099750
10	3:52993987	60	4.89711540	1ó	3.00038122	60	3.93388175
11	3 64765094	61	4.901 38468	11	3.08500066	61	3.93663625
12	3.75161076	62	4.90546443	12	3.15903692	62	3.93926758
13	3.84402887	63	4.90936405	13	3'22431154	63	3.94178193
14	3.92666601	64	4.91309242	14	3.28225086	64	3.94418512
15	4.00094262	65	4.91665788	15	3.33398790	65	3.94648263
16	4.06801726	66	4.92006832	16	3.38043406	66	3.94867964
17	4.12884435	67	4.92333118	17	3.42233079	67	3.95078101
18	4.18421722	68	4.92645348	18	3.46028750	68	3.95279139
19	4.23480076	69	4.92968485	19	3.49480963	69	3.95487139
2ó	4.58115638	70	4.93230261	20	3.2632001	70	3.9565560
21	4.32376143	71	4.93504167	21	3.22217200	71	3.95831836
22	4.36302438	72	4.93766465	22	3.58167714	72	3.96000566
23	4.39929677	73	4.94017691	23	3.60608489	73	3.96162138
24	4.43288287	74	4.94258348	24	3.62862041	74	3.96316884
25	4.46404731	75	4.94488917	25	3.64947570	75	3.9646511
26	4.49302138	76	4.94709852	26	3.66881759	76	3.96607126
27	4.2000873	77	4.94921586	27	3.68679211	77	3.96743199
28	4.54518648	78	4.95124528	28	3.70352573	78	3.96873601
29	4.56871482	79	4.95319068	29	3.71913212	79	3.96998584
30	4.20073381	80	495505000	30	3.73371930	80	3.97118389
31	4.61136877	81	4.95684408	31	3'74734848	81	3'97233249
32	4.63073179	82	4.95855890	32	3.76012522	82	3.97343369
33	4.64892338	83	4 96020358	33	3.77211070	83	3.9744896
34	4.66603395	84	4.96178101	34	3.78336782	84	3.97550240
35	4.68214504	85	4.96329414	35	3.79395310	85	3.97647371
36	4 69733038	86	4.96474572	36	3.80391752	86	3.97740540
37	4.71165684	87	4.96613838	37	3.81330711	87	3.9782991
38	4.72518514	88	4.96747464	38	3.82216361	88	3.9791566
39	4.73797062	89	4 96875688	39	3.83052490	89	3.97997939
řó.	4.75006377	90	4.96998739	10	3.83842548	90	3.9807688
41	4.76151077	91	4.97116835	41	3.84589681	91	3.98152644
42	4.77235393	92	497230183	42	3.85296766	92	3 98225351
43	4.78263210	93	4.97338983	43	3.85966437	93	3.98295134
44	4.79238101	94	4.97443423	44	3.86601110	94	3.9836211
45	4.80163357	95	4.97543685	45	3.87203009	95	3.9842641
46	4'81042017	96	4.97639942	46	3.87774180	96	3.98488130
47	4.81876886	97	4.97732360	47	3.88316211	97	3'98547393
48	4.82670564	98	4.97821098	48	3.88831738	38	3.98604286
19	4.83425458	99	4.07906305	49	3.89321497	99	3'98658912
T7 (4.84143805	100	4.97988128	50	3.89787261	100	3.9871136

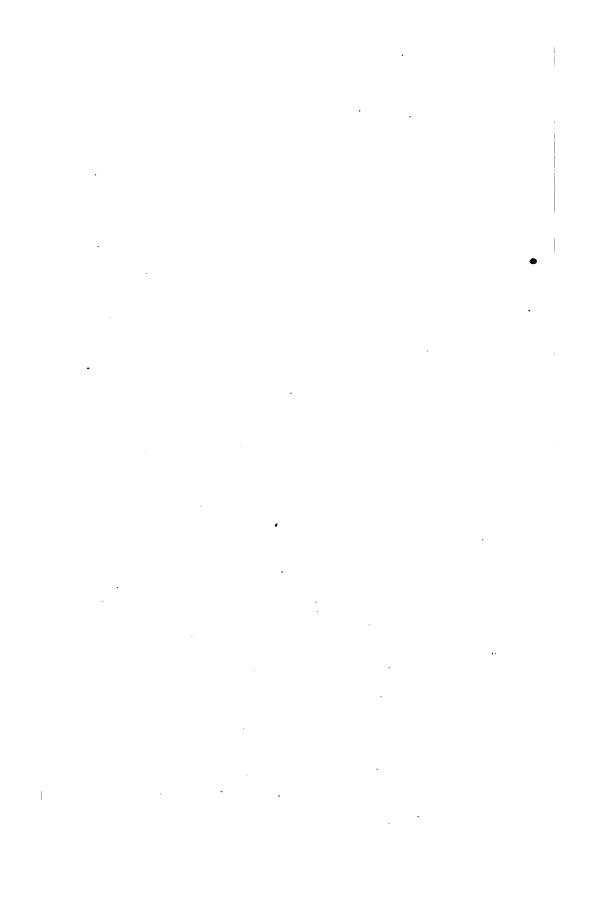


TABLE X.

FOR

VALUING MINERAL AND OTHER PROPERTIES.

. • • • .

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 4 per cent.

				,)	
n Years	Deferred 1 Year	n Years	Deferred 1 Year	n Years	Deferred 2 Years	n Years	Deferred 2 Years
r	924555	51	19811710	1	-888996	51	19049726
2	1.805329	52	19'941812	2	1.735894	52	19.174824
3	2.645001	53	20.067701	3	2.243270	53	19295871
4	3.446039	54	20.189527	4	3.313500	54	19.413011
5	4.210724	55	20:307432		4.048774	55	19 526381
5	4.941163	56	20.421552	5	4.751119	56	19.636112
	5·6393 0 9	57	20.532021		5.422414	57	19.742333
7	6.306021	58	20.638964	7	6.064397	58	19.845163
9	6.945829	59	20.742504	9	6.678684	59	19.944720
1ó	7.557448	60	20.842756	1ó	7.266779	60	20.041117
11	8.143283	61	20.939834	11	7.830081	61	20-134461
12	8.704688	62	21.033841	12	8.369895	62	20.224852
13	9.242932	63	21.124894	13	8.887437	63	20.312403
14	9.759197	64	21.213079	14	9 38 38 46	64	20:397197
15	10.254592	65 66	21.298497	15	9.860187	65	20.479330
16	10.730152	66	21.381243	16	10.317456	66	20.558892
17	11.186849	67	21.461403	17	10.756589	67	20.635970
18	11.625597	68	21.539064	18	11.178462	68	20.710643
19	12047253	69	21.614309	19	11.283900	69	20.782994
20	12.452622	70	21.687217	20	11.973678	70	20.853098
21	12.842463	71	21.757865	21	12.348525	71	20.921029
22	13.217491	72	21.826327	22	12.709129	72	20.986858
23	13.578379	73	21.892675	23	13.056137	73	21 050654
24	13.925764	74	21 · 95 6 978	24	13.390161	74	21.112484
25	14·260246	75	22019300	25	13.711778	75	21.172409
26	14.582392	76	22 079708	26	14.021534	76	21.230493
27	14.892740	77	22·1 38261	27	14.319946	77	21.286795
28	15.191798	78	22.192022	28	14.607501	78	21.341373
29	15.480046	79	22.250045	29	14.884664	79	21.394279
30	15.757942	80	22:303388	30	15-151872	80	21.445571
31	16.025919	81	22.355104	31	15.409542	81	21.495297
32	16.284387	82	22.405243	32	15.658069	82	21.543508
33	16.533736	83	22.453857	33	15.897827	83	21.290253
34	16.774338	84	22.500995	34	16.129175	84	21.635577
35	17.006545	85	22.546702	35	16.352451	85	21.679535
36	17.230692	86	22.591023	36	16.267977	86	21.722143
37	17:447099	87	22.634002	37	16.776061	87	21.763469
38	17.656071	88	22.675680	38	16.976996	88	21.803544
39	17.857898	89	22.716101	39	17.171060	89	21.842410
40	18052856	90	22.755302	10	17.358519	90	21.880103
41	18.241208	91	22.793320	41	17.539627	91	21.916659
42	18.423208	92	22.830194	42	17.714627	92	21.952115
43	18.599094	93	22.865957	43	17.883749	93	21.986503
44	18.769098	94	22.900647	44	18 047214	94	22.019828
45	18.933438	95	22.934294	45	18.205233	95	22.022211
46	19.042326	96	22.966931	46	18.328011	96	22.083593
47	19.245962	97	22.998591	47	18.505737	97	22.114035
48	19.394538	98	23.029302	48	18.648599	98	22.143566
49	19.538238	99	23.059094	49	18.786772	99	22.172211
50	19.677239	100	23.087995	50	18-920426	100	22.300000

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 4 per cent.

allowed to a Purchaser at 4 per cent.								
n Years	Deferred 3 Years	n Years	Deferred 3 Years	n Years	Deferred 4 Years	n Years	Deferred 4 Years	
1	854803	51	18:317041	1	821927	51	17.612542	
2	1.669128	52	18.437327	2	1.604931	52	17.728202	
3	2.445452	53	18.553719	3	2.321392	53	17.840118	
4	3.186022	54	18.666354	4	3.063212	54	17'948420	
	3.893051		18.775363		3.743319		18053237	
5	4.268383	55 56	18.880874	5	3 /43319 4·392677	55	18.124690	
			18.983009			1 - 1		
7 8	5·213858 5·831150	57 58	19081884	7 8	5 01 3326 5 606876	57	18.252897	
	6.421810		19.177612	"	6.174819		18·347969 18·440015	
9 10	6-987286	59 60	19.270301	10	6718546	59 60	18.529139	
11	7.528923	61	19:360055	11	7.239350	61	18-615441	
12	8.047974	62	19.446970	12	7.738438	62	18699013	
13	8.545611	63	19.531153	13	8.216935	63	18779958	
14	9022927	64	19612686	14	8675893	64	18.858355	
15	9.480948	65	19.691660	15	9116297	65	18934292	
16	9'920629	66	19768162	16	9.539068	66	19.007852	
17	10.342872	67	19842275	17	97945071	67	19079114	
18	10.748519	68	19.914077	18	10.332116	68	19.148154	
19	11.138363	69	19983645	19	10.709967	69	19.215047	
20	11.213120	70	20.051052	20	11 070338	70	19279861	
21	11.873580	71	20.116370	21	11:416906	71	19:342667	
22	12.550314	72	20179668	22	11.750304	72	19.403530	
23	12.553976	73	20.541010	23	12.071133	73	19:462513	
24	12.875152	74	20:300462	24	12.379956	74	19.519678	
25	13.184400	75 76	20.358082	25	12.677310	75	19.575083	
26	13.482242		20.413932	26	12.963697	76	19.628785	
27	13.769176	77	20.468069	27	13.539595	77	19:680839	
28	14:045672	78	20.520547	28	13.202426	78	19731299	
29	14.312174	79	20.571419	29	13.761708	79	19780214	
30	14.569105	80	20.620738	30	14.008757	80	19.827636	
31	14.816864	81	20.668552	31	14.246987	81	19.873611	
32	15.055833	82	20.714908	32	14.476765	82	19.918185	
33	15.586370	83	20.759855	33	14.698435	83	19 961403	
34	15.208850	84	20.803436	34	14.912329	84	20.003308	
35	15.723508	85	20.845695	35	15.118760	85	20043941	
36	15.930744	86	20.886672	36	15.318026	86	20083342	
37	16.130822	87	20.926408	37	15.510412	87	20.121550	
38	16.324032	88	20.964943	38	15.696187	88	20.1 2860 3	
39	16.210632	89	21.002314	39	15.822611	89	20·194536	
40	16.690881	90	21 038557	40	16.048927	90	20.529385	
41	16.865023	91	21.073707	41	16.216371	91	20.263184	
42	17033292	92	21.107799	42	16.378169	92	20.295964	
43	17:195909	93	21:140865	43	16.534531	93	20:327758	
44	17:353177	94	21.172937	44	16 68 5664	94	20:358597	
45	17:505029	95	21.204042	45	16.831762	95	20:388509	
46	17.651930	96	21.234221	46	16.973013	96	20.417524	
47	17:793975	97	21.263492	47	17.109594	97	20.445669	
48	17 931 342	98	21.291886	48	17:241678	98	20.47297 1	
49	18 064200	99	21.319430	49	17.369427	99	20:499456	
50	18.192712	100	21.346151	50	17:492998	100	20.525148	

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 5 per cent.

n Years	Deferred 1 Year	n Years	Deferred 1 Year	n Years	Deferred 2 Years	n Years	Deferred 2 Years
1	907030	51	16.270609	1	*863837	51	15.495810
2	1755182	52	16.359105	2	1.671601	52	15.280001
3	2.549675	53	16.444546	3	2.428261	53	15.661463
4	3.295128	54	16.527051	4	3.138215	54	15.740040
	3.995648	55	16.606738	اخا	3.805377	55	15.815932
5	4.654900	56	16.683714	5	4.433236	56	15.889242
7	5.276163	57	16.758083		5.024914	57	15.060020
7.	5.862379	58	16.829945	7 8	5.283312	58	16.028200
9	6.416197		16.899393		6.110661		
10		59 60		.9		59	16.094651
	6.940009	100	16.966521	10	6.609528	60	16.158582
11	7:435978	61	17.031412	11	7.081879	61	16:220383
12	7:906064	62	17:094149	12	7.529581	62	16.580133
13	8.352055	63	17.154819	13	7.954333	63	16.337913
14	8.775575	64	17:213488	14	8.357685	64	16.393788
15	9.178109	65	17.270232	15	8.741051	65	16.447831
16	9.261017	66	17:325122	16	9.105725	66	16.200106
17	9925543	67	17.378223	17	9.452893	67	16.550679
18	10.272834	68	17.429600	18	9.783646	68	16.599609
19	10.603940	69	17.479313	19	10098984	69	16.646955
2ó	10 9 1 9 8 3 4	70	17.527423	20	10.399836	70	16.692774
21	11.221410	71	17.573984	21	10.687051	71	16.737118
22	11.209499	72	17.619651	22	10.961421	72	16.780039
23	11.784865	73	17.662677	23	11.223675	73	16.821587
24	12 048224	74	17:704911	24	11.474493	74	16.861811
25	12:300235	75	17.745801	25	11.714503	75	16.900753
26	12.241212	76	17.785393	26	11.944290	76	16.938460
27	12.772629	77	17.823732	27	12.164403	77	16.974973
28 l	12.994119	78	17.860860	28		78	
29	13.206481	79	17.896818	29	12:375344		17.010333
30	13.410180	80	17.931646	30	12·577593 12·771592	79 80	17:044579 17:077748
31	13605651	81	17:965381	31	12.957756	81	17.109877
32	13.793304	82	17 998060	32	13.136423	82	17:141000
33	13973521	83	18.029719	33	13.308107	83	17.171151
34	14.146661	84	18.060301	34	13.473002	84	17.200363
35	14.313062	85	18.000100	35	13.631479		17.228666
36	14.473041	86	18.118004	36		85 86	
30		87	18-146807		13.783840		17.256089
37 38	14.626897	88		37 38	13.930370	87	17.282663
30	14.774911	89	18.173847		14.071336	88	17.308415
39	14.917348	90	18.200051	39	14.506990	89	17:333372
	15.054461	1 1	18.225449	20	14.337573	90	17.357560
41	15.186484	91	18.250064	41	14.463309	91	17.381003
42	15.313642	92	18.273922	42	14.584412	92	17:403725
43	15.436146	93	18.297049	43	14.701082	93	17.425751
44	15.554195	94	18.319468	44	14.813511	94	17:447102
45	15.667982	95	18.341200	45	14.921879	95	17:467799
46	15.777684	96	18.362269	46	15.026357	96	17.487866
47	15.883471	97	18.382695	47	15.127107	97	17.507319
48	15.985508	98	18.402499	48	15.224285	98	17.526179
49	16 08 39 47	99	18·42170L	49	15.318036	99	17.544467
80	16·178935	100	18:440319	50	15.408501	100	17.562198
•	,	. ,		1	, , . , . ,	1	-, ,52.95

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 5 per cent.

n Years	Deferred 3 Years	n Years	Deferred 3 Years	n Years	Deferred 4 Years	n Years	Deferred 4 Years
	.822703	51	14.757928	1	.783526	51	14.055155
2	1.592002	52	14.838196	2	1.216191	52	14.131601
3	2.312632	53	14.915694	3	2.202504	53	14.205408
4	2.988779	54	14.990529	4	2.846453	54	14.276679
	3.624172	55	15062807		3.451589	55	14.345516
5	4.555133	56	15.132627	5	4.021022	16	14.412011
7	4.785637	57	15.300081	7	4.257742	57	14.476253
8	5.317353	58	15.265262	8	5.064141	38	14.538330
- 1	5.819683		15.328254	9		1 - 1	14.598322
9	6.294795	59	15.389141	10	5.242249	59 60	14 656309
~	0 294/93	1 1	15 309141		5.995037	1 1	14 050509
11	6.744654	61	15:447999	11	6.423473	61	14.712365
12	7·171036	62	15.204904	12	6.829551	62	14.766560
13	7:575563	63	15.259933	13	7.214814	63	14.818968
14	7.959708	64	15.613147	14	7.580667	64	14.869648
15	8.324819	65	15664616	15	7.928391	65	14.918667
16	8.672128	66	15714403	16	8.259160	66	14.966082
17	9.002764	67	15.762567	17	8.574052	67	15.011953
18	9.317767	68	15.809167	18	8.874055	68	15.056334
19	9618090	69	15.854259	19	9.160076	69	15.099275
2ó	9.904615	7Ó	15.897896	2ó	9.432957	7Ó	15.140837
21	10.178154	71	15.940128	21	9.693470	71	15.181028
22	10.439459	72	15.981006	22	9.942331	72	15.219989
23	10.689225	73	16.020575	23	10.180503	73	15.257675
24	10.928099	74	16058883	24	10.407703	74	15.294159
25	11·156680	75	16.095971	25	10.625399	75	15.329480
2 6	11.375526	76	16.131883	26	10.833823	76	15.363682
27	11.585156	77	16.166657	27	11033470	77	15.396800
28	11.786054	78	16.200333	28	11.224801	78	15.428873
29	11 978672	79	16.232948	29	11.408247	79	15.459935
3ó	12.163433	BÓ	16.264538	3ó	11.584210	80	15.490020
31	12.340732	81	16.295137	31	11.753066	81	15.219162
32	12.510939	82	16:324778	32	11.912168	82	15.247391
33	12.674400	83	16.353493	33	12.070845	83	15.574739
34	12.831444	84	16.381314	34	12.220410	84	15 601235
35	12.982374	85	16.408269	35	12.364153	85	15.626907
36	13.127480	86	16.434387	36	12.502349	l 86 l	15.651780
37	13.267032	87	16.459695	37	12.635256	87	15.675884
38	13.401286	88	16.484221	38	12.763116	88	15.699242
39	13.530480	89	16.507990	39	12.886158	89	15.721879
40	13.654845	90	16.531026	40	13004601	90	15.743818
41	13.774594	91	16.553353	41	13.118647	91	15.765081
42	13.889930	92	16.574993	42	13.228491	92	15.785691
43	14.001045	93	16.595970	43	13.334312	93	15.805669
44	14.108110	94	16.616304	44	13.436290	94	15.825035
45	14.211327	95	16.636016	45	13.234283	95	15.843808
46	14.310830	96	16.655127	46	13.629348	96	15.862000
47	14.406783	97	16.673653	47	13.720731	97	15.879653
48	14.499333	98	16.691616	48	13.808875	98	15.896761
49	14.588621	99	16.709033	49	13.893910	99	
50	14.674777	100	16.725920	50	13.975964	100	15'913348 `
1	-7 -/ 7///		,-,,	🕶	-J 7/ 33 ⁰ 4	1000	15.929431

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 6 per cent.

n Years	Deferred 1 Year	n Years	Deferred 1 Year	n Years	Deferred 2 Years	n Years	Deferred 2 Years
1	.889996	51	13.765407	1	839619	51	12.986230
2	1.707162	52	13.829301	2	1.610530	52	13.046507
3	2.459768	53	13.990894	3	2.320536	53	13.104613
4	3.154685	54	13.950283	4	2.976306	54	13.160641
71	3.798585		14.007558	1 7	3.583570	55	13.214674
5	4.396119	55	14062807	5	4.147281	56	13.266796
		56	14.116114	7	4.671739	57	13.317082
7 8	4.952045	57	14.167555	7 8	5.160401	38	
	5.470345	58					13.365615
9	5.954510	59	14.217208	9	5.617461	59	13.412457
10	6.407613	60	14-265141	10	6.044916	60	13.457677
11	6.733368	61	14.311425	11	6.445629	61	13.201341
12	7.231189	62	14.356119	12	6.821875	62	13.543505
13	7.606220	63	14:399295	13	7.175677	63	13.584237
14	7:959378	64	14:441001	14	7:508846	64	13.623583
15	8.292383	65	14:481299	15	7.823001	65	13.661600
16	8.606775	66	14.20241	16	8.119597	66	13[.]6 9833 7
17	8.903950	67	14.557878	17	8.399950	67	13.733843
18	9.185162	68	14.594258	18	8.665245	68	13.768164
19	9.451552	69	14.629430	19	8.916556	69	13:801345
20	9.704152	70	14 [.] 663436	20	9.154858	70	13.833427
21	9.943906	71	14.696321	21	9.381041	71	13.864450
22	10.171671	72	14.728126	22	9.595914	72	13.894455
23	10.388233	73	14.758888	23	9.800218	73	13.923476
24	10.594311	74	14.788646	24	9.994630	74	13.951550
25	10.790563	75	14.817436	25	10.179774	75	13.978710
26	10.977598	76	14.845293	26	10.356222	76	14 004990
27	11.155937	77	14.872249	27	10.24500	77	14.030420
28	11.326202	78	14.898337	28	10.685094	78	14.055031
29	11.488763	79	14.923586	29	10.838453	79	14.078851
30	11.644095	8ó	14.948026	3ó	10.984993	80	14.101902
31	11.792608	81	14.971685	31	11.122099	81	14.124228
32	11.934679	82	14.994590	32	11.259128	82	14.145836
33	12.070660	83	15016767	33	11.387412	83	14.166728
34	12.500880	84	15.038242	34	11.210261	84	14.187012
35	12.325643	85	15.059037	35	11.627962	85	14.206635
36	12.445235	86	15:079176	36	11.740785	86	14.525634
37	12.259920	87	15.098680	37	11.848978	87	14.544034
38	12.669949	88	15.117574	38	11.952779	88	14.261858
	12.775553	89	15.135874	39	12.052405	89	14.279123
39	12.881951	90	15.153603	40	12.148064	90	14.295847
41	12.974347	91	15.170777	41	12.239947	91	14.312051
- 1	21, 10	92	15.187418	42	12.328236	92	
42	13.067934		15.203541		12 320230		14:327749
43	13.157892	93	15.519164	43	12.494706	93	14:342959
44	13.244393	94		44		94	14.357698
45	13.327593	95	15.234303	45 46	12.573198	95	14.371980
46	13.407646	96	15.248975		12.648719	96	14.385821
47	13.484694	97	15.263193	47	12.721406	97	14.399235
48	13.558870	98	15.276974	48	12.791384	98	14.412236
49	13.630302	99	15 290330	49	12.858773	99	14.424836
50	13.699110	100	15.303277	50	12.923685	100	14:437050

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 6 per cent.

n Years	Deferred 3 Years	n Years	Deferred 3 Years	n Years	Deferred 4 Years	n Years	Deferred 4 Years
	•792093	51	12'251162	-	747258	51	11.257709
2	1.210368	52	12.308028	2	1.433367	52	11.611356
3	2.180182	53	12.362845	3	2065270		11.663070
	2.807836		12.415701		2.648904	53	11.712934
4	3.3807.34	54	12.466676	4	3.189362	54	11.761024
5	3.912530	55	12.515847	5	3.691069	55	11.807412
7	4.407302		12.263290	7	4.124832		11.852169
8	4.868587	57	12 503290	8		57	11.895360
9	5:299492	58	12.653263	9	4.200522	58	11.937040
10	5.702752	59 60	12.695923	10	4.999525	59	11.977295
		1 1	12 093923		5:379959	1	
11	6080783	61	12.737116	111	5.736592	6ì	12:016156
12	6.435732	62	12:776894	12	6071450	62	12:053683
13	6 ·769508	63	12.815320	13	6.386333	63	12089933
14	7°83818	64	12.852438	14	6.682852	64	12.124951
15	7:380191	65	12.888304	15	6.962449	65	12·158786
16	7.659999	66	12922961	16	7.226419	66	·12·191482
17	7.924483	67	12 956458	17	7.475933	67	12.223083
18	8.174761	68	12988836	18	7.712044	68	12.253628
19	8.411846	69	13020139	19	7.935710	69	12.283159
20	8·636660	70	13.050405	2ó	8.147799	7Ó	12.311712
21	8.850040	71	13079672	21	8:349101	71	12.339323
22	9052750	72	13.107978	22	8.540337	72	12:366027
23	9'245490	73	13.135356	23	8.722167	73	12.391855
24	9.428898	74	13.161841	24	8.895193	74	12.416841
25	9.603562	75	13.187464	25	9059971	75	12.441013
26	9.770022	76	13.212256	26	9.217000	76	12.464402
27	9.928775	77	13.236248	27	9.366776	77	12:487036
28	10080278	78	13.259466	28	9.509704	78	12.508939
29	10.224957	79	13.281937	29	9.646194	79	12.530139
3ó	10.363202	8ó	13.303688	30	9.776613	8ó	12.550659
31	10.495378	81	13.324745	31	9'901 307	81	12.570524
32	10.621821	82	13'345130	32	10020593	82	12.589755
33	10.742844	83	13.364868	33	10.134766	83	12.608376
34	10.858739	84	13.383980	34	10.544101	84	12.626406
35	10.969778	85	13.402488	35	10.348855	85	12·643866
36	11.076214	86	13.420411	36	10.449266	86	12.660775
37	11.178283	87	13.437770	37	10.545558	87	12.677152
38	11.276208	88	13.454585	38	10.637940	88	12.693015
39	11.370195	89	13.470872	39	10.726607	89	12.708380
*0	11.460439	90	13.486651	40	10.811743	90	12.723265
41	11.547121	91	13.201937	41	10.893519	91	12.737686
42	11.630413	92	13.516747	42	10.972096	92	12.758658
43	11.710476	93	13.231096	43	11 047627	93	12.765194
44	11.787461	94	13.245001	44	11.120254	94	12.778312
45	11.861509	95	13.558474	45	11.100115	95	12.791023
46	11932756	96	13.571532	46	11.257325	96	12.803342
47	12'001328	97	13.584186	47	11.322017	97	12.815279
48	12.067345	98	13.596451	48	11:384297	98	12.826850
49	12.130919	99	13.608338	49	11.444272	99	12.838065
50	12.192158	100	13.619860	50	11.502044	100	12.848935

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 8 per cent.

	anowed to a Furchaser at o per cent.										
n Years	Deferred 1 Year	n Years	Deferred 1 Year	n Years	Deferred 2 Years	n Years	Deferred 2 Years				
1	·857339 V	51	10.458443	1	793832	51	9.683745				
2	1.617025	52	10.495982	2	1.497246	52	9.718503				
3	2 294563	53	10.532094	3	2.124596	53	9.751940				
4	2.902343	54	10.566844	4	2 687355	54	9.784116				
5	3.450383	55	10.600296		3.194799	55	9.815090				
6	3.946871	56	10.632504	5	3.654510	56	9.844912				
7 8	4.398565	57	10.663524	7 8	4.072746	57	9.873635				
	4.811095	58	10.693406	8	4.454718	58	9.901304				
9	5.189184	59	10.722205	9	4.804800	59	9.927969				
10	5.536825	60	10.749962	10	5.126690	60	9.953670				
11	5.857420	61	10.776721	11	5.423538	61	9 9 7 8 4 4 7				
12	· 6·153883	62	10.802524	12	5 698040	62	10.002338				
13	6.428723	63	10.827414	13	5.952522	63	10.025384				
14	6.684115	64	10.851424	14	6.188996	64	10047616				
15	6.921953	65	10.874593	15	6.409217	65	10.069068				
16	7.143892	66	10.896952	16	6.614716	66	10.089771				
17	7.351389	67	10.918536	17	6.806842	67	10.109757				
18	7.545725	68	10.939374	18	6.986783	68	10.130021				
19	7.728036	69	10.959497	19	7:155590	69	10.147684				
20	7.899334	70	10.978931	20	7.314199	70	10.165679				
21	8.060518	71	10.997705	21	7 46344	71	10.183061				
22	8.212394	72	11.015841	22	7.604070	72	10.199854				
23	8.355684	73	11.033367	23	7.736745	73	10.516085				
24	8.491040	74	11.050303	24	7.862076	74	10.231763				
25 26	8.619648	75 76	11 [.] 066673 11 [.] 082498	25 26	7.980601	75	10.546921				
27	8·740240 8·855095	77	11.097798	27	8.092812 8.199163	76	10.261574				
28	8.964053	78	11.112592	28	8.300020	77 78	10 [.] 275740 10 [.] 289438				
29	9.067513	79	11.156808	29	8.395845	79	10.302685				
30	9.165836	80	11.140736	30	8.486886	80	10.315498				
31	9.259359	81	11.154120	31	8.573482	81	10:327891				
32	9.348386	82	11.167069	32	8.655914	82	10.339880				
33	9.433197	83	11.179597	33	8.734443	83	10.351480				
34	9.514050	84	11.191719	34	8.809307	84	10.362705				
35	9.591183	85	11.203450	35	8.880726	85	10.373566				
36	9.664816	86	11.214804	36	8-948904	86	10.384079				
37	9.735151	87	11.225793	37	9.014030	87	10.394254				
38	9.802377	88	11.236430	38	9.076276	88	10.404103				
39	9:866667	89	11.246728	39	9.135804	89	10.413638				
20	9928183	90	11.256698	40	9.192763	90	10.422870				
41	9 [,] 987078	91	11.566325	41	9*247295	91	10.431809				
42	10043489	92	11.275700	42	9.299528	92	10.440464				
43	10.097547	93	11.584752	43	9.349582	93	10:448846				
44	10.149376	94	11.293519	44	9:397571	94	10.456964				
45	10.199088	95 96	11.302011	45	9.443601	95	10.464826				
46	10.246791		11.310236	46	9.487770	96	10.472442				
47	10.292583	97 98	11.318202	47 48	9·530171 9·570890	97 98	10.479820				
48	101336560 101378807		11.325923	49	9.610008	99	10.4938 1				
49		99 100		50	9.647603	100	10.200601				
80° I	10.419410	,200	11 34004/		9 14/003	1200	10 20001				

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 8 per cent.

n Years	Deferred 3 Years	Years n	Deferred 3 Years	n Years	Deferred 4 Years	n Years	Deferred 4 Years
1	735030,	51	8 966426	1	*680583 *	51	8.302251
2	1.386338	52	8.998610	2	1.283647	52	8·332050 <i>′</i>
3	1.967217	53	9029570	3	1.821498	53	8.360717
4	2.488290	54	9059362	4	2.303974	54	8.388303
	2.958146	55	9088042		2.739025	55	8.414858
5	3.383804	36	9.112622	5 6		36	8.440425
					3.133154		
7 8	3.771059	57	9.142250	7 8	3.491723	57	.8.465050
- 1	4.124737	58	9.167869	11 1	3.819203	58	8.488772
9	4 448887	59	9.192559	9	4.119345	59	8.511633
10	4.746933	60	9.216356	10	4.395310	60	8.533667
11	5.031,263	61	9239298	11	4.649809	61	8.554910
12	5.275961	62	9.261420	12	4.885151	62	8.575393
13	5.211291	63	9:282759	13	5.103328	63	8.595151
14	5.730549	64	9.303343	14	5.306067	64	8.614211
15	5 934457	65	9:323207	15	5.494870	65	8.632603
16	6.124734	66	9:342376	16	5.671053	66	8·65035 3
17	6.302628	67	9.360881	17	5.835770	67	8.667487
18	6.469240	68	9.378746	18	5.990040	68	8.684029
19	6.625543	69	9.395999	19	6.134765	69	8.700003
20	6.772403	70	9.412661	20	6.270747	70	8.715431
21	6.910593	71	9.428755	21	6.398700	71	8.730334
22	7.040802	72	9.444304	22	6.519264	72	8.744731
23	7.163650	73	9.459330	23	6633012	73	8.758643
24	7.279696	74	9.473850	24	6.740463	74	8.772088
25	7.389442	75	9.487885	25	6.842079	75	8.785083
26	7'493344	76	9.501452	26	6.938285	76	8.797645
27	7.591814	1 ' 1	9.514569	27	7.029461	- 1	8.809791
28	7.685227	77		28		77 78	8.821535
			,9:527253		7·115955 7·198084		
29	7:773927	79	9.539518	29		79	8.832892
30	7.858224	80	9.551382	30	7.276137	80	8-843877
31	7:938405	81	9.562857	31	7:350379	81	8.854501
32	8014731	82	9.573958	32	7.421051	82	8.864781
33	8 087443	83	9·584699	33	7·488377	83	8.874726
34	8-156761	84	9.595092	34	7.552560	84	8.884349
35	8.222891	85	9.605149	35	7.613791	85	8·893661
36	8.586018	86	9.614883	36	7.672243	86	8.902674
37	8.346319	87	9.624304	37	7.728077	87	8.911397
38	8.403955	88	9.633424	38	7.781444	88	8919841
39	8.459073	89	9.642253	39	7.832479	89	8.928016
40	8.511814	90	9.650801	40	7.881313	9ó	8 935931
41	8.562306	91	9 [.] 65907 7	41	7.928065	91	8.943594
42	8.610670	92	9.667092	42	7.972846	92	8.951015
43	8.657016	93	9.674852	43	8.015760	93	8.958201
44	8.701451	94	9.682369	44	8.056903	94	8.965161
45	8.744071	95	9.689649	45	8.096366	95	8.971902
46	8.784968	96	9.69670 í	46	8.134234	96	8.978431
47	8.824228	97	9.703532	47	8-170585	97	8.984757
48	8.861931	98	9.710150	48	8.205496	98	8.990884
49	8.898151	99	9.716561	49	8.239033	99	8.996820
50	8932961	100	9.722773	50		100	9 002572
90 1	2 73-701	, 200	7///3	,, 55	3 2/1203	,_vu (A 0053/2

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 10 per cent.

Years	Deferred 1 Year	n Years	Deferred 1 Year	n Years	Deferred 2 Years	Years	Deferred 2 Years				
	·826446	51	8.376107	1	751315	51	7.614643				
2	1.534044	52	8.400615	2	1.394585	52	7 6 3 6 9 2 3				
3	2.146460	53	8.424161	3	1.951327	53	7.658329				
4	2.681470	54	8.446792	4	2.437700	54	7.678902				
	3.152684	55	8.468549		2.866077	55	7.698681				
5	3.570698	56	8.489475	5	3.546000	56	7.717693				
	3.943887	57	8.509606		3.285351	57	7.736005				
7 8	4.543004	58	8.528979	7 8	3.889957	58	7:753617				
9	4.281330	59	8.547628	9	4.164842						
10	4.855464	60	8.565585	10	4.414058	59 60	7:770571 7:786896				
	5.102031	61	8.582881	111	4.640937	61	7.802619				
12	5:333097	62	8.599543	12	4.848270	62	7.817767				
13	5.242239	63	8.615602	13	5038399	63	7.832365				
14	5.734636	64	8.631079	14	5.513306	64	7.846436				
	5.012140	65	8.646002	15	5.374681	65	7.860002				
15	6076370	66	8.660392	16	5.523973	66	7.873084				
17	6-228675	67	8.674273	17	5.662432	67	7.885702				
i 8	6.370256	68	8.687664	18	5.791142	68	7.897876				
19	6.202121	69	8.700585	19	5.911046	69	7.909623				
20	6.625268	70	8.713056	20	6022971	70	7.920960				
21	6.740409	71	8.725095	21	6.127644	71	7.931905				
22	6.848277	72	8.736719	22	6.5522	72	7 93190 3				
23	6.949498	73	8.747943	23	6.317725	73	7.952675				
24	7:044627	74	8.758784	24	6.404206	74	7.962531				
25	7.134161	75	8.769256	25	6.485601	75	7 972051				
26	7'218542	76	8.779374	26	6.262311	76	7.981249				
27	7.298171	77	8.789150	27	6.634701	77	7.990137				
28	7:373405	78	8.798599	28	6.703095	78	7·998726				
29	7 37 3403 7 444 5 6 7	79	8.807731	29	6.767789		8007029				
30	7·51 1952	80	8.816560	30	6.829048	79 80	8015055				
31	7:575825	81	8.825096	31	6.887114	81	8.022815				
32	7.636428	82	8.833350	32	6.942207	82	8030318				
33	7.693981	83	8.841332		6.994528	83	8037575				
33 34	7.748685	84	8.849053	33	7044259	84	8 044593				
	7.800724	85	8.856521	34	7:091568	85	8.021383				
35 36	7.850269	86	8.863746	35 36	7.136608	86	8:051383 8:057951				
	7.897473	87	8.870736			87	8.064306				
37 38		88	8.877500	37 38	7.179521	88					
30	7:942479	89	8.884046	" - "	7:220435	89	8·070455 8·076405				
39	7:985421 8:026415	90	8.890381	39 40	7°259474 7°296471	90	8082165				
41	8065580	91	8.896513	41	7:332345	91	8 287739				
42	8.103016	92	8.902449	42	7·366378	92	8093136				
43	8.138851	93	8.908196	43	7:398928	93	8.098360				
	8-173084	93	8.913759	44	7·4300 7 7		8.103418				
44	8.205889	95	8.919146	45	7.459900	94	8.108312				
45 46	8.237314	96	8.924363	46	7.488468	96	8.113057				
40		97			7·515846		8.113027				
47 48	8.267431	98	8:929415	47 48	7.542098	97 98	8.132098				
	8·296307 8·324007	99	8.934308	49	7.567279		8.126406				
49		100	8.939047	50		99 100					
50	8.350588	1200	8.943637	190	7.591444	-00	8.130579				

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 10 per cent.

n Years	Deferred 3 Years	Years	Deferred 3 Years	n Year	Deferred 4 Years	n Years	Deferred 4 Years
1	683013	51	6.022402	1	620921	51	6.293093
2	1.267805	52	6.942657	2	1.152550	52	6.311507
3	1.773934	53	6.962117	3	1.612667	53	6.329197
4	5.516001	54	6.980820	4	2.014628	54	6.346200
	2.605524	55	6998801		2.368658	55	6.362547
5	2.02000	56	7016095	5	2.682719	56	6.378268
7	3.529410	57	7032732	7	2.963100	57	6.393393
8		58	7048743	8	3.214841	58	6.407948
9	3·53632 5 3·78622 3			9			
10		59	7.064155		3.442021	59	6.421959
	4.012780	60	7 0 7 8 9 9 6	10	3.647982	60	6.435451
11	4.519034	61	7.093290	11	3.835485	61	6.448446
12	4.407519	62	7.107061	12	4 006835	62	6.460964
13	4·58036 3	63	7.120332	13	4.163966	63	6.473029
14	4.739369	64	7.133124	14	4.308512	64	6.484658
15	4.886073	65	7.145456	15	4.441885	65	6.495869
16	5.021794	66	7.157349	16	4.565267	66	6·506681
17	5.147666	67	7.168820	17	4 679696	67	6.517109
18	5.264674	68	7.179887	18	4.786068	68	6.527170
19	5.373678	69	7.190566	19	4.885162	69	6.536879
20	5.475429	70	7:200873	20	4 977662	70	6.546248
21	5.570586	71	7.210823	21	5.064169	71	6.555293
22	5.659733	72	7*220429	22	5.145212	72	6.264026
23	5.743386	73	7 229705	23	5.221260	73	6.572459
24	5.822006	74	7.238664	24	5.292733	74	6.580604
25	5.896001	75	7.247319	25	5.360001	75	6.588472
26	5.965738	76	7.255681	26	5.423398	76	6.596073
27	6.031546	77	7.263761	27	5.483224	77	6.603419
28	6.093723	78	7.271569	28	5.539748	78	6.610518
29	6.152535	79	7.279117	29	5.593214	79	6.617379
30	6.208222	Bó	7.286413	30	5.643841	Bó	6.624012
31	6.561013	81	7.293468	31	5.691830	81	6.630425
32	6.311097	82	7:300289	32	5.737361	82	6.636627
33	6.358662	83	7:306886	33	5.780602	83	6.642624
34	6.403872	84	7:313267	34	5.821702	84	6-648424
35	6.446880	85	7:319439	35	5.860800	85	6.654035
36	6.487825	86	7.325410	36	5.898023	86	6.659463
37	6.526837	87	7.331187	37	5.933488	87	6.664715
38	6.564032	88	7.336777	38	5.967302	88	6.669797
39	6.599522	89	7:342187	39	5.999565	89	6 674715
40	6.633401	90	7:347422	40	6.030365	90	6.679475
41	6.665768	91	7.352490	41	6.059789	91	6.684082
42	6.696707	92	7.357596	42	6.087916	92	6.688542
43	6.726298	93	7.362145	43	6.114812	93	6.692859
43 44	6.754615	94	7.366743	44	6.140229	94	6.697039
45	6.781727	95	7.371196	45	6.16206	95	6.701087
46	6.807698	96	7:375507	46	6.188816	96	6.705006
	6.832588	97	7.379682	47	6.511443	97	6.708802
47 48	6.856452	98	7.383726	48	6.533139	98	6.712478
•	6.879344	99	7 387642	49	6.523920	99	6.716038
49 50	, ,,,,,,	100		50	6.523930	100	
30	6.901313	1200	1 / 391430	30	1 0 2/3920	1-00	1 0/1940/

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 12 per cent.

n Years	Deferred 1 Year	Years	Deferred 1 Year	n Years	Deferred 2 Years	n Years	Deferred 2 Years
1	.797194	51	6.946476	1	711780	51	6.303311
2	1.457462	52	6.963631	2	1:301306	52	6.217528
3	2.013060	53	6.980098	3	1.797383	53	6.232230
4	2·486886	54	6·995910	4	2.220428	54	6.246349
5	2.895553	55	7011101		2.585316	55	6.259911
5	3.251212	56	7:025698	5 6	2.903136	56	6.272945
	3.264210	57	7039731	7	3.182330	57	6.285474
7 8	3.840966	58	7.053226	8	3.429434	58	6.297523
9	4.087540	59	7.066207	9	3.649589	59	6.300113
10	4.308522	60	7.078698	10	3.846894	60	6.320266
11	4.507616	61	7.090721	11	4.024657	61	6.331001
12	4.687847	62	7.102297	12	4.185578	62	6.341337
13	4.851705	63	7.113446	13	4.331880	63	6.351291
14	5.001263	64	7.124186	14	4.465413	64	6.360880
15	5.138256	65	7.134535	15	4.587728	65	6:370120
16	5.264151	66	7.144509	16	4.700135	66	6.379026
17	5.380196	67	7.154125	17	4 803746	67	6.387611
18	5.487458	68	7.163397	18	4.899516	68	6.395890
19	5.586856	69	7.172340	19	4.988264	69	6.403875
20	5-679185	70	7.180967	2ó	5 070701	7ó	6.411577
21	5.765138	71	7.189291	21	5.147445	71	6.419009
22	5.845318	72	7.197324	22 .	5.219034	72	6.426182
23	5.923829	73	7:205078	23	5.585133	73	6.433106
24	5 990423	74	7.212564	24	5.348592	74	6.439790
- 25	6.056230	75	7.219793	25	5.407349	75	6.446244
.26	6.118046	76	7.226775	26	5.462541	76	6.452478
27	6.176198	77	7.233519	27	5 5 1 4 4 6 2	77	6 458499
28	6.230979	78	• 7.240034	28	5.563374	78	6.464316
29	6.282653	79	7.246323	29	5.609511	79	6.469932
30	6.331455	80	7.252412	30	5.653085	80	6.475368
31	6.377600	81	7.258292	31	5 694286	18	6.480618
32	6.421279	82	7.263976	32	5.733285	82	6 48 5 6 9 3
33	6.462668	83	7.269471	33	5.770239	83	6.490600
34	6.201922	84	7.274785	34	5.805290	84	6.495344
35	6.539196	85	7.279923	35	5.838568	85	6.499932
36	6.574611	86	7.284893	36	5.870189	86	6.204369
37	6.608293	87	7.289700	37	5.900261	87	6.508661
38	6.640350	88	7.294350	38	5.928884	88	6.512813
. 39	6.670886	89	7.298849	39	5.956149	89	6.516830
40	6 699994	90	7:303203	40	5.982138	90	6.520717
41	6.727759	91	7:307416	41	6.006928	91	6.524478
42	6.754262	92	7:311493	42	6.030591	92	6.28118
43	6.779574	93	7:315439	43	6.053191	93	6.531642
44	6.803766	94	7.319259	44	6.074791	94	6.535052
45	6.826899	95	7:322957	45	6.095445	95	6.538354
46	6.849032	96	7.326537	46	6.115207	96	6.541551
47	6.870219	97	7.330003	47	6.134124	97	6.544646
48	6.890512	98	7.333360	48	6.152242	98	6.547643
49	6.909956	99	7.336610	49	6.169604	99	6.550545
50	6.928597	100	7.339758	50	6.186248	100	6.553356

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 12 per cent.

n I	Thefamed 9 V	l n l	Defend 0 V	l n	Deferred A V	n	Defermed A Ver-
Years	Deferred 3 Years	Years	Deferred 3 Years	Years	Deferred 4 Years	Years	Deferred 4 Years
1	635518	51	5.537688	1	·56742 7	51	4.944365
2	1.161880	52	5.551364	2	1.037393	52	4.956575
3	1.604806	53	5.564491	3	1.432863	53	4.968296
4	1.982525	54	5.577097	4	1.770112	54	4.979551
	2.308317	55	5.589206		2.060998	55	4.990363
5	2.592086	56	5.600844	5	2.314362	56	5.000753
	2.841366	57	5.612031	7	2.536934	57	5.010742
7 8	3.061992	58	5.622788	8	2.733924	58	5.050347
9	3.258562	59	5.633137	9	2.909430	59	5.029587
10	3.434727	60	5.643095	10	3.066721	60	5.038478
11	3.593444	61	5.652680	11	3.208432	61	5 047035
12	3.737123	62	5.661908	12	3.336717	62	5°55275
13	3.867750	63	5.670796	13	3 [.] 453348	63	5.063210
14	3.986976	64	5.679357	14	3.559800	64	5.070855
15	4.096186	65	5.687607	15	3.657309	65	5.078221
16	4.196549	66	5.695559	16	3.746919	66	5085320
17	4.289059	67	5.703224	17	3.829517	67	5.092165
18	4.374568	68	5.710616	18	3.905864	68	5.098764
19	4.453807	69	5.717745	19	3.976614	69	5.105130
20	4.527412	7ó	5.724623	2ó	4.042332	70	5 111270
21	4.595933	71	5.731258	21	4.103511	71	5.117195
22	4.659852	72	5.737663	22	4 160582	72	5.122913
23	4.722440	73	5.743844	23	4.216464	73	5.128432
24	4.775529	74	5.749812	24	4.263865	74	5.133761
25	4.827990	75	5.755575	25	4.310702	75	5.138906
26	4.877269	76	5.761141	26	4.354704	76	5.143876
27	4.923627	77	5.766517	27	4.396096	77	5.148676
28	4.967298	78	5.771711	28	4.435088	78	5.123313
29	5 008492	79	5.776725	29	4.471868	79	5.157790
3ó	5.047397	80	5.781579	30	4.506605	80	5.162124
31	5.084184	81	5.786266	31	4.539450	81	5·166309
32	5.119004	82	5 .790797 `.	32	§ 4·570540	82	5.140322
33	5.151999	83	5.795178	33	* 4·599999	83	5.174266
34	5.183295	84	5.799414	34	4.627942	84	5.178048
35	5.213007	85	5.803510	35	4.654470	85	5.181706
36	5.241240	86	5.807472	36	4.679678	86	5.185243
37	5·268090	87	5.811304	37	4.703652	87	5.188664
38	5.293647	88	5.815011	38	4.726470	88	5.191974
39	5.317990	89	5.818598	39	4.748205	89	5.195177
40	5.341194	90	5 822069	10	4.768923	90	5.198275
41	5.363329	91	5.825427	41	4.788686	91	5.201274
42	5.384456	92	5.828677	42	4 807550	92	5.204176
43	5.404635	93	5.831823	43	4.825567	93	5.206985
44	5.423920	94	5.834868	44	4.842786	94	5.209704
45	5.442362	95	5.837816	45	4.859252	95	5.212336
46	5.460006	96	5·84067 0	46	4.875005	96	5.214884
47	5.476897	97	5.843434	47	4.890086	97	5.217352
48	5.493074	98	5.846110	48	4.904530	98	5.219741
49	5.508575	99	5.848701	49	i 4.918370	99	5.222054
50	5.523436	100	5.851211	50	4.931639	100	5.224295

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 15 per cent.

Years	Deferred 1 Year	n Years	Deferred 1 Year	n Years	Deferred 2 Years	Years	Deferred 2 Years
1	756144	51	5.485046	1	657516	51	4.769605
2	1.353176	52	5.496023	2	1.176674	52	4.779150
3	1.836345	53	5.206220	3	1.596822	53	4.788304
4	2.235231	54	5.216621	4	1 94 3679	54	4.797087
- E	2.269983	55	5.526345	5	2.234767	55	4.805517
5	2.854801	36	5.235654	5	2.482436	56	4.813613
	2:000084						
7 8	3.099984	57	5.244596	7 8	2.695638	57	4.821387
	3.313180	58	5.553188		2.881026	58	4.828859
_ 9	3.200188	59	5.561448	9	3°043642	59	4.836041
10	3.665487	60	5.269390	10	3.187380	60	4.842947
11	3.812588	61	5.577029	11	3.315293	61	4.849590
	3.944285		5.584380	u ,	3.429813		4.855982
13	4062828	63	5.201452	13	3.532894	63	4.862134
14	4.170020	64	5.598266	14	3.626130	64	4.868057
15	4.267458	65	5 604826	15	3.710833	65	4.873761
16	4:356303		5.611145	16	3.788089	66	4.879256
17	4.437632	67	5617233	17	3 [.] 858810	67	4.884550
18	4.212330	68	5 623101	18	3.923765	68	4.889653
19	4.581147	69	5.628758	19	3.983606	69	4.894572
20	4.644724	70	5.634212	20	4.038890	70	4.899315
21	4.703613	71	5.639473	21	4.090098	71	4.903889
22	4.758291	72	5.644547	22	4.137644	72	4:908301
23	4.809173	73	5.649443	23	4.181889	73	4.912559
24	4.856620	74	5.654168	24	4.223148	74	4.916667
25	4.900951	75	5.658729	25	4.261696	75	4-920633
26 l	4.942445	76	5.663131	26	4.297778	76	4.924462
27	4.981349	77	5.667383	27	4.331608	77	4.928158
28	5017884	78	5.671488	28	4.363377	78	4.931729
29	5052244	79	5.675454	29	4.393255	79	4.932177
30	5.084602	80	5·679285	30	4 393255 4 421 395	80	4.938509
31	5.115122	81	5.682987	31	4.447932	81	4.941728
32	5.143938	82	5.686564	32	4.472989	82	4 944838
33	5.171178	83	5.690022	33	4.496676	83	4.947845
34	5.196929	84	5.693364	34	4.219094	84	4.950751
35	5.551385	85	5 696595			85	
36	•	86		35	4.540332	86	4.953560
	5'244544		5.699719	36	4.560473		4.956277
37	5.266530	87	5702740	37	4.279291	87	4.958904
38	5.287418	88	5.705662	38	4.297722	88	4.961445
39	5.307281	89	5.708488	39	4.615026	89	4 96 3902
40	5.326183	90	5711222	40	4.631463	90	4.966280
41	5.344186	91	5.713867	41	4.647117	91	4.968580
42	5.361344	92	5.716426	42	4.662038	92	4.970805
43	5.377708	93	5.718903	43	4.676268	93	4.972959
44	5:393327	94	5.721300	44	4.689849	94	4.975043
45	5.408243	95	5723619	45	4.702820	95	4.977060
46	5.422497	96	5.725865	46	4.715214	96	4.979012
47	5.436125	97	5728039	47	4.727065	97	4.980903
48	5.449163	98	5.730143	48	4.738402	98	4.982733
49	5.461643	99	5.732181	49	4.749254	99	4.984505
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Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 15 per cent.

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Tears	Deferred 3 Years	Years	Deferred 3 Years	Years	Deferred 4 Years	Years	Deferred 4 Years
1	·57175 3	51	4.147482		497177	51	3 606506
2	1023195	52	4.155783	2	889735	52	3.613724
3	1:388541	53	4.163743	3	1'207427	53	3.620646
4	1.690156	54	4.171380	4	1.469701	54	3.627287
\$	1 943276	55	4.178711	3	1 689805	55	3.63366t
5	2.158640	56	4.185749	5	1.877078	56	3.639782
7	2.344033	57	4.192211		2038290	57	3.645661
7	2.205240	58	4.199008	7 8	2.178470	58	3.651311
9	2.646645	59	4.205253	9	2.301430	59	3.656742
10	2.771634	60	4.211258	1ó	2.410117	60	3 661964
11	2·8 82864	61	4.217035	11	2.206838	61	3 ·666 987
12	27982446	62	4.222593	12	2.293431	62	3671820
13	3'072082	63	4.227943	13	2.671375	63	3.676472
14	3.153157	64	4.533093	14	2741875	64	3680951
15	3.556811	65	4.238053	15	2.805923	65	3.685264
16	3.293990	66	4.242831	16	2.864340	66	3689419
17	3.355487	67	4.547432	17	2917815	67	3.693422
18	3.411970	68	4.251872	18	2.966930	68	3:697280
19	3.464002	69	4.256149	19	3012178	69	3700999
20	3.2078	70	4.260273	20	3053981	70	3.704586
21	3.556607	71	4.264251	21	3.092702	71	3.708044
22	3.597951	72	4.268088	22	3.128653	72	3.711380
23	3.636425	73	4.271790	23	3.162109	73	3.714600
24	3.672302	74	4.275363	24	3.193306	74	3.717707
25	3.705823	75	4.278811	25	3.222455	75	3:720706
26	3.737198	76	4.585141	26	3'249737	76	3.723601
27	3.766615	77	4.582322	27	3.522318	77	3.726396
28	3.794241	78	4.288460	28	3.599340	78	3.729095
29	3.820222	79	4.591428	29	3.321932	79	3731703
30	3.844691	80	4'294355	30	3.343210	80	3.734222
31	3.867767	81	4.297124	31	3.363276	18	3.736656
32	3.889556	82	4.299859	32	3.382222	82	3739008
33	3.010123	83	4.302474	33	. 3.400133	83	3.741281
34	3.929647	84	4.302001	34	3.417084	84	3.743479
35	3 948115	85	4:307444	35	3.433143	85	3.745603
36	3.965628	86	4.309806	36	3.448373	86	3747657
37	3.982253	87	4.312090	37	3.462829	87	3.749644
38	3.998047	1 2 -	4.314300	38	3.476563	88	3.751565
39	4.013066	89	4.316437	39	3.489623	89	3753423
40	4027359	1	4.318504	40	3.202021	90	3755221
41	4.040972	91	4:320504	41	3.213888	91	3.756960
42	4.053946	92	4:322439	42	3.525170	92	3758643
43	4.066320	93	4:324312	43	3.235930	93	3°760271 3°761847
44	4 0781 30	94	4.326124	44	3.546200	94	
45	4.089408	95	4:327878	45 46	3.556007	95	3.763372
46	4·100186 4·110491	96	4:329576		3.565379	96	3·764849 3·766278
47 48		97	4:331220	47 48	3:574340	97	3.767662
49	4·120350 4·129786	99	4·332811 4·334352	49	3.282913	98	3769002
50	4.138823	100		50	3.598977	200	

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 18 per cent.

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Years	Deferred 1 Year	Years	Deferred 1 Year	Years	Deferred 2 Years	Years	Deferred 2 Years
1	718184	51	4:494990	1	·608631	51	3.809313
2	1.259952	52	4.20252	. 2	1 067756	52	3.815722
3	1.683032	53	4.209799	3	1.426298	53	3.821864
4	2°022441	54	4.516749	4	1.713933	54	3.827753
5	2:300657	55	4.523415	5	1 949710	55	.3.833403
	2.532767	56	4.529813	6	2.146413	56	3.838824
7	2729276	57	4.235922	7	2:312946	57	3.844030
	2·89772 3	58	4.541854	8	2.455698	58	3.849029
9	3.043659	59	4.24722	9	2.579372	59	3.853832
10	3.171261	60	4.552969	10	2 687509	60	3.858448
11	3.283734	61	4.558207	11	2782825	61	3.862887
12	3:383577	62	4.263244	12	2.867438	62	3.867156
13	3.472777	63	4.268091	13	2.943022	63	3.871263
14	3.552889	64	4.572755	14	3.010923	64	3.875216
15	3.625230	65	4.577244	15	3.072229	65	3.879021
16	3.690843	66	4.281268	16	3.127833	66	3.882685
17 18	3.750600	67	4.585732	17	3.178475	67	3.886214
	3.805229	68	4.289744	18	3.224770	68	3.889614
19	3.855342	69	4.593610	19	3.267239	69	3.892890
20	3 901456	70	4.597337	20	3.306319	70	3.896048
21	3.944016	71	4.600930	21	3·342386	71	3.899094
22	3983398	72	4.604396	22	3.375761	72 .	3.902030
23	4.019932	73	4.607738	23	3.406722	73	3 [.] 904863
24	4.053901	74	4.610963	24	3.435510	74	3'907595
25	4.085553	75	4.614074	25	3.462333	75	3.010232
26	4:115105	76	4.617078	26	3.487377	76	3.912778
27	4.142746	77	4619977	27	3.210803	77	3.915235
28	4.168647	78	4.622776	28	3.532751	78	3.917607
29	4.192922	79	4.625479	29	3.223321	79	3.010808
30	4.215803	80	4 628090	30	3.572715	80	3.922110
31	4.537311	81	4.630612	31	3.590941	81	3.924247
32	4.257584	82	4.633049	32	3.608122	82	3.926313
33	4.526212	83	4.635403	33	3.624336	83	3.928308
34	4.294796	84	4.637679	34	3.639658	84	3.930237
35	4.311899	85 86	4.639879	35	3.654152	85	3.932101
36	4.328096		4.642005	36	3.667878	86	3.933903
37 38	4.343450	87	4.644061	37	3.68089 0	87	3 935645
	4.358020	1 1	4.646049	38	3.693237	88	3.937330
39	4.371857	89	4.647972	39	3.704964	89	3.938959
40	4.382011	90	4.649831	40	3.716111	90	3.940535
41	4.397525	91	4.651630	41	3.726716	91	3.942060
42	4.409440	92	4.653371	42	3.736813	92	3'943534
43	4.420793	93	4.655054	43	3.746435	93	3°944961
44	4.431618	94	4.656684	44	3.755608	94	3.946342
45	4:441947	95	4.658260	45	3.764362	95	3.947678
46	4.451809	96	4.659786	46	3.772719	96	3 [.] 948972
47	4.461231	97	4.661264	47	3.780704	97	3.950223
48	4.470237	98	4.662694	48	3.788337	98	3.951435
49	.4·478852 4·487096	99	4.664078	49	3.795637	99	3.952668
50	4 40/090	TOO	4.665418	50	3.802624	100	3.953744

Present Value (or Years' Purchase) of £1 per Annum in n years, after years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 18 per cent.

Yeers	Deferred 3 Years	n Years	Deferred 3 Years	n Years	Deferred 4 Years	n Years	Deferred 4 Years
1	.515789	51	3.558535	I	*437109	51	2735790
2	904878	52	3.233663	2	•766846	52	2.740392
3	1.208727	53	3.238868	3	1 024345	53	2.744803
4	1.452486	54	3.243859	4	1.530050	54	2.749033
			3.548646		• •		
5	1.652296	55	•	5	1.400251	55	2753090
	1.818994	56	3.523341		1.541520	56	2756984
7 8	1.961024	57	3.25762	7	1.661122	57	2.760722
	2081100	58	3.261889	8	1.763644	58	2 [.] 764313
9	2.185908	59	3.265959	9	1.852465	59	2.767762
10	2.277550	60	3.269872	10	1.930127	60	2.771078
- 11	2.358326	61	3.273633	11	1 998582	61	2774265
12	2.430032	62	3.277251	12	2.059349	62	2.777331
13	2:494087	63	3.280731	13	2 113633	63	2.780281
14	2.251630	64	3.284081	14	2.162398	64	2.783120
15	2.603584	65	3.287306	15	2.506452	65	2.785852
16	2.650706	66	3 290411	16	2.546361	66	2788484
17	2.693623	67	3.293401	17	2.282731	67	2791018
18	2.732856	68	3.296283	18	2.315980	68	2.793460
19	2.768846	69	3.50020	19	2.346480	69	2.795813
20	2.801965	70	3.301236	20	2.374547	70	2.798081
21	2.832531	71	2:204217	21	2.400450	71	2.800268
			3.304317	11		1 '	
22	2.860815	72	3.306802	22	2'424419	72	2.802377
23	2.887053	73	3.309206	23	2.446655	73	2.804412
24	2.911449	74	3.311522	24	2.467330	74	2.806374
25	2.934181	75	3.313756	25	2:486594	75	2.808268
26	2.955404	76	3.315913	26	2.504580	76	2·81co96
27	2.975256	77	3.317995	27	2.521403	77	2.811861
28	2.993857	78	3.320006	28	2.537167	78	2.813564
• 29	3.011315	79	3.321947	29	2.551962	79	2.815209
30	3.027724	80	3.323822	30	2.565868	80	2.816798
31	3.043171	81	3.325633	31	2.578958	81	2.818333
32	3.057730	82	3.327383	32	2.591297	82	2.819817
33	3.071471	83	3.329075	33	2 602942	83	2.821250
34	3 084456	84	3.330709	34	2.613946	84	2.822635
35	3 096739	85	3.332289	35	2.624355	85	2.823973
36	3.108321	86	3.333816	36	2 634213	86	
30		87					2.825268
37	3.119398	88	3.335292	37	2.643558	87	2.826519
38	3.129862		3.336720	38	2.652425	88	2.827729
39	3.130800	89	3.338101	39	2.660847	89	2.828899
40	3.149247	90	3.339437	10	2 668853	90	2.830031
41	3.158234	91	3.340728	41	2 676469	91	2.831126
42	3.166791	92	3.341978	42	2.683721	92	2.832185
43	3.174945	93	3.343188	43	2.690631	93	2.833210
44	3.182719	94	3.344358	44	2.697220	94	2.834201
45	3.190132	95	3.345490	45	2.703506	95	2 835161
46	3.197220	96	3 346586	46	2 709508	96	2.836090
47	3.503986	97	3'347647	47	2.715243		
48	3.510422	98	3.347047		, , , ,	97	2.836989
	3 210435		3 3400/4	48	2.720724	98	2.837859
49	3.216642	99	3.349668	49	2.725968	99	2'838702
50	3.222563	100	3.350631	50	2.730985	100	2.839517

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 20 per cent.

n Years	Deferred 1 Year	n Years	Deferred 1 Year	n Years	Deferred 2 Years	n Years	Deferred 2 Years
1	694444	51	3.996154	1	·578704	51	3.330129
2	1'203177	52	4'002231	2	1 002647	52	3:335193
3	1'591757	53	4.008024	. 3	1.326465	53	3.340045
4 !	1.898137	54	4.013635	4	1.281781	54	3.344696
5	2.145805	55	4018988		1.788171	55	3.349156
5	2.350085	56	4.024123	5	1.958402	56	3.353436
7		57	4'029052		2.101123		
7 8	2.521384	1 26 1		7 8		57	3.357543
	2.667039	58	4033784		2.222532	58	3.361487
9	2.792355	59	4.038330	9	2.326963	59	3.365275
10	2.901270	60	4.042698	10	2.417725	60	3.368915
11	2:996767	61	4~046897	11	2.497306	61	3.372414
12	3081147	62	4050934	12	2.267622	62	3:375779
13	3.126212	63	4.054818	13	2:630177	63	3.379012
14	3.223398	64	4.058555	14	2.686165	64	3.382129
15	3.283858	65	4.062121	15	2.736548	65	3.385126
16	3.338530	66	4.065614	16	2.782108	66	3 386011
17	3.388188	67	4.068948	17	2.823490	67	3.390790
18	3.433471	68	4.072160	18	2.861226	68	3.393467
19	3.474917	69	4.075255	19	2.895764	69	3.396046
20		70	4.078238	20	2.927481	70	3 398531
	3.212977	1,01		20		100	3 390531
21	3.548035	71	4081113	21	2.956696	71	3.400927
22	3·58042 0	72	4083885	22	2·983683	72	3.403238
23	3.610412	73	4.086559	23	3.008677	73	3 405 366
24	3.638257	74	4.089138	24	3031881	74	3.407615
25	3.664165	75	4.091627	25	3.053471	75	3.409689
26	3.688323	76	4.094028	26	3 07 3602	76	3.411690
27	3.710891	77	4.096347	27	3.092409	77	3.413622
28	3.732013	78	4.098584	28	3.110011	78	3.415487
29		79	4.100442	29	3.126213		3.417288
30	3751816					79	
1	3.770410	80	4.105835	30	3.142009	80	3.419026
31	3.787897	81	4.104842	31	3.156281	81	3:420706
32	3.804365	82	4.106792	32	3.170304	82	3.422329
33	3.819894	83	4.108626	33	3.183245	83	3·42389 7
34	3.834556	84	4.110494	34	3.195464	84	3.425412
35	3.848416	85	4.112221	35	3.207014	85	3.426876
36	3.861532	86	4'113950	36	3.217944	86	3.428291
37	3.873958	87	4.112292	37	3.228298	87	3.429660
38	3.885740	88	4.117180	38	3.238117	88	3.430983
39	3.896924	89	4.118712	39	3.247437	89	3.432262
20	3.907550	90	4.120200	40	3.256291	90	3.433500
41	3.917653	91	4.121636	41	3.264711	91	3.434697
42	3.927267	92	4.123026	42	3.272722	92	3.435855
43	3.936423	93	4.124370	43	3.280353		3.436975
44	3.945120	94	4.125670	44	3.582652	93	3.438059
45		95	4.156959		3.50429	94	
46	3.953472	96	4.128142	45		95	3.439108
	3.961415			46	3.301179	96	3.440123
47	3.969000	97	4.129326	47	3.307500	97	3.441105
48	3.976249	98	4.130467	48	3.313540	98	3.442056
49	3 .983179	99	4.131572	49	3.319316	99	3.442976
50	3.9 89 8 09	100	4.132641	50	3:324840	100	3.443868
					-		•

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 20 per cent.

Years	Deferred 3 Years	Years	Deferred 3 Years	n Years	Deferred 4 Years	n Yoars	Deferred 4 Years
1	*482253	51	2775107	1	401878	51	2:312589
2	-835539	52	2.779327	2	696283	52	2.316106
3	1.105387	53	2.783371	3	921156	53	2.319476
4	1.318120	54	2.787247	4	1 098459	54	2:322706
7			2.790964		1.241286		2.325803
5	1.490143	55		5		55	
- 0	1.632002	56	2.794530		1.360001	56	2.328775
7 8	1750961	57	2.797952	7 8	1.459134	57	2.331627
	1.852110	58	2.801239	11	1.243422	58	2.334366
9	1 939136	59	2.804396	9	1 615946	59	2.336997
10	2014771	60	2.807429	10	1.678976	60	2.339524
11	2081088	61	2.810345	11	1.734240	61	2.341954
12	2.139685	62	2.813149	12	1.783071	62	2.344291
13	2.191814	63	2.815846	13	1.826512	63	2.346538
14	2.238471	64	2.818441	14	1.865392	64	2.348701
15	2.280457	65	2.820938	15	1900381	65	2.350782
16	2.318424	66	2'823343	16	1.932020	66	2.352786
17	2.352908	67	2.825658	17	1.960757	67	2.354715
18	2.384355	68	2.827889	18	1.986963	68	2.356574
19	2.413137	69	2.830038	19	2.010047	69	2.358365
20	2.439567	70	2.832110	20	2032973	70	2.360091
21	2.463913	71	2.834106	21	2.053261	71	2.361755
22	2.486402	72	2.836032	22	2 07 200 2	72	2.363360
23	2'507231	73	2.837888	23	2089359	73	2.364907
- 1	2.526567		2.839679	24	2.102473		2:366400
24		74		и .	2.120466	74	1 2 2
25	2.544559	75	2.841408	25		75	2.367840
26	2.561335	76	2.843075	26	2.134446	76	2.369229
27	2.577008	77	2.844685	27	2.147506	77	2.370571
28	2.591676	78	2.846239	28	2'159730	78	2.371866
29	2.605428	79	2.847740	29	2.171190	79	2.373116
30	2.618341	80	2'849189	30	2.181921	80	2.374324
31	2.630484	81	2.850588	31	2.192020	81	2.375490
32	2'641920	82	2.851941	32	2.301600	82	2.376617
33	2.652704	83	2.853247	33	2.210282	83	2'377706
34	2.662886	84	2.854510	34	2'219072	84	2.378758
35	2.672511	85	2.855730	35	2.227093	85	2:379775
36	2.681620	86	2.856910	36	2:234683	86	2.380758
37	2.690248	87	2.858050	37	2'241874	87	2:381708
38	2.698431	88	2.859152	38	2.248692	88	2.382627
39	2706198	89	2.860210	39	2.255165	89	2.383516
40	2713576	90	2.861250	40	2.261313	90	2.384375
41	2720592	91	2.862247	41	2 2 6 7 1 6 0	91	2.385206
42	2727269	92	2.863212	42	2.272724	92	2.386010
43	2733627	93	2 864146	43	2.278023	93	2.386788
44	2.739687	94	2.865049	44	2.283073	94	2'387541
45	2.745467	95	2.865923	45	2.287889	95	2.388269
46	2.750983	96	2.866769	46	2.292486	96	2.388974
			2.867587		2.296875		2.389656
47	2.756250	97		47		97	
48	2761284	98	2.868380	48	2.301020	98	2.390317
49	2766096	99	2.869147	49	2:305080	99	2:390956
50	2770702	100	2.869890	50	2:308917	100	2:391575

TABLE XI.

FOR

VALUING MINERAL AND OTHER PROPERTIES.



Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3½ and 4 per cent., with Interest allowed to a Purchaser at 20 per cent.

DEFERRED 1 YEAR.

n Tears	Redemption 31 per cent.	n Years	Redemption 3½ per cent.	Years	Redemption 4 per cent.	n Years	Redemption 4 per cent.
1	694444	51	4019519	1	694444	51	4040229
2	1.302383	52	4025291	2	1.207386	52	4045657
3	1.296622	53	4030807	3	1.601490	53	4050828
4	1.905846	54	4036080	4	1913553	54	4055758
	2.126206		4.041153	1 7 1	√ 2·166600	55	4.060428
5	2.362939	55 56	4.045948	5	2.375780	36	4°064943
7	2.236440	57	4050717		2 3/5/60		
7 8	2.684045	36		7 8	2.551465	57	4069221
		1 30	4.054988		2.700998	58	4.073305
9	2.811080	59	4059224	9	2.829721	59	4 077204
10	2.921502	60	4063283	10	2.941612	60	4080928
11	3018318	61	4.067172	111	3~039708	61	4084486
12	3.103848	62	4.070901	12	3.126341	62	4087885
13	3.179914	63	4°074478	13	3·20 3 356	63	4091135
14	3 [.] 247967	64	4.077908	14	3.272220	64	4094242
15	3.309172	65	4'081199	15	3.334118	65	4'097213
16	3.364491	66	4 084358	16	3.390013	66	4'100055
17	3.414697	67	4087392	17	3.440702	67	4.102774
18	3.460445	68	4.090304	18	3.486846	68	4.105376
19	3.202279	69	4093101	19	3.528999	69	4.108060
2Ó	3.240629	7ó	4 095788	20	3.567629	70	4.110521
21	3.575976	71	4.098370	21	3.603133	71	4.112533
22	3.608565	72	4.100852	22	3.635852	72	4.114210
23	3.638711	73	4.103237	23	3.666079	73	4.116813
24	3.666665	74	4.105530	24	3.694068	74	4.118818
25	3.692642	75	4.107736	25	3.720038	75	4.150230
26	3.716830	76	4.109857	26	3.744183	76	4.155281
27	3739396	177	4.111892	27	3.766673	77	4.154342
28	37560485	78	4.113859	28	3.787653	78	4.126036
29	3.780226	79	4.112222	29	3.807261	79	
29 BO	3.798734	80	4.117262	30	3.825610	80	4·127658 4·129207
31	3.816111	81	4.119312	31	3.842806	81	4.130702
32	3.832448	82	4.150008	32	3.858942	82	4.135131
33	3.847828	83	4.155650	33	3.874101	83	4.133203
33	3.862322	84	4.124181	33	3.888360	84	
	3.875999	85	4.125684		3.901786	85	4.134816
35	3.888917	86	4 123004	35 36		86	4.136077
36		87	4 12/132		3.914440	87	4.137287
37	3.301131	88		37	3.926379	88	4.138447
38	3.912691		4.129870	38	3.937653		4.139201
39 LO	3°923641 3°934023	89	4·131164 4·132411	39 40	3 [.] 948308 3 [.] 95838 5	89	4·140629 4·141654
-	3.943873	11	4-133613		3.967924	1 1	
41	3'9430/3	91		41		91	4.142638
42	3.953226	92	4.134771	42	3.976960	92	4.143583
43	3.962115	93	4.135887	43	3.985525	93	4.144490
44	3 970567	94	4.136963	44	3.993649	94	4.145360
45 46	3.978609	95	4.138000	45	4'001360	95	4.146196
46	3 986267	96	4.138999	46	4008682	96	4.146998
47	3.993562	97	4.139963	47	4015639	97	4.147768
48	4.000516	98	4.140853	48	4022253	98	4.148208
	4.007149	99	4.141788	49	4.028543	99	4.149218
49	4 44/ 143	1 77 1	4 .4./00	11 77 !	4743	1 77 1	4 -475.0

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3½ and 4 per cent., with Interest allowed to a Purchaser at 20 per cent.

DEFERRED 2 YEARS.

n rears	Redemption 3½ per cent.	n Years	Redemption 31 per cent.	n Years	Redemption 4 per cent.	Years	Redemption 4 per cent.
1	-578704	51	3'349599	1	.578703	51	3.366857
2	1'004403	52	3.354408	2	1006155	52	3:371380
3	1.330521	53	3.359005	3	1.334575	53	3.375690
4	1.588205	54	3.363399	4	1.594627	54	3.379798
	1796838	55	3.367601	5	1.805500	55	3.383715
5	1.969116	56	3.371623	6	V 1.979816	56	3.387451
	2.113700	57	3.375596		2.126220	57	3.391017
7 8	2.236704	58	3.379156	7 8	2.250831	38	3.394420
9	2.342566	59	3.382686	9	5.328101	59	3.397669
ro	2.434585	60	3.386068	10	2.451346	60	3.400772
11	2.515265	61	3·389309	11	2.533089	61	3.403737
12	2.586540	62	3.392417	12	2.605284	62	3.406570
13	2.649929	63	3.395397	13	2 669463	63	3.409278
14	2:706639	64	3.398255	14	2726850	64	3.411867
15	2.757646	65	3.400999	15	2.778431	65	3.414344
16	2.803742	66	3.403631	16	2.825010	66	3.416712
17	2.845581	67	3.406159	17	2.867251	67	3.418978
18	2.883704	68	3.408586	18	2 905704	68	3.421146
19	2.918566	69	3.410917	19	2.040832	69	3.423390
2ó	2.950549	70	3.413156	20	2.973023	70	3.425208
21	2.979980	71	3.415308	21	3.002610	71	3.427110
22	3.002132	72	3.417376	22	3°029876	72	3.428932
23	3.032259	73	3.419363	23	3055065	73	3.430676
24	3.055554	74	3.421274	24	3.078389	74	3'432347
25	3.077201	75	3.423112	25	3.100031	75	3.433948
26	3 0 9 7 3 5 8	76	3.424880	26	3.120121	76	3.435483
27	3.116163	77	3.426580	27	3.138893	77	3.436953
28	3.133737	78	3.428215	28	3.156377	78	3.438362
29	3.120188	79	3.429637	29	3.172717	79	3.439714
3ó	3.165612	80	3.431303	30	3.188008	8ó	3.441005
31	3.180093	81	3.432762	31	3.202338	81	3.442251
32	3,193202	82	3.434164	32	3.215784	82	3'443442
33	3.206523	83	3.435516	33	3.228417	83	3.444584
34	3.518605	84	3.436817	34	3.240299	84	3.445679
35	3.229999	85	3.438069	35	3.251488	85	3.446730
36	3.240764	86	3.439276	36	3.262033	86	3.447738
37	3.250943	87	3.440438	37	3.271982	87	3.448705
38	3.260576	88	3.441558	38	3.281376	88	3.449633
39	3.269701	89	3.442636	39	3.290256	89	3.450523
ěó	3.278352	90	3.443675	40	3.298653	90	3.451378
41	3.286561	91	3.444676	41	3.306603	91	3.452198
42	3.294355	92	3.445642	42	3.314133	92	3.452985
43	3.301762	93	3.446571	43	3.321270	93	3.453741
44	3.308806	94	3.447468	44	3.328040	94	3.454466
45	3:315508	95	3.448333	45	3.334466	95	3.455162
46	3.321889	96	3.449165	46	3.340367	96	3.455830
47	3.327968	97	3.449969	47	3.346365	97	3.456473
48	3.333763	98	3.450743	48	3.351877	98	3.457089
49	3.339291	99	3.451489	49	3.357119	99	3.457680
SÓ	3.344565	100	3.452210	50	3.362108	100	3.458248

TABLE XL

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3½ and 4 per cent., with Interest allowed to a Purchaser at 20 per cent.

Defered 3 Years.

		, ,		4 1			
n Years	Redemption 31 per cent.	Years	Redemption 31 per cent.	n Years	Redemption 4 per cent.	n Years	Redemption 4 per cent.
1	·482253	51	2.791335	1	.482253	51	2.805717
2	·837 0 03	52	2.795343	2	·838463	52	2.809486
3	1.108268	53	2.799174	3	1.112142	53	2.813078
4	1.323502	54	2.802836	4	1.328857	54	2.816501
5	1.497366	55	2.806338	5	T-EOAERE	55	2.819765
	1.640930	56	2.809689	6	1.649849	56	2.822879
7 8	1.761418	57	2.813000		1.771852	57	2.825850
8	1.863921	58	2.815967	7 8	1.875695	58	2.828687
9	1.952140	59	2.818908	9	1.965086	59	2.831394
10	2.028822	60	2.821727	10	2.042790	60	2.833980
11	2.096055	61	2.824427	111	2.110910	61	2·836451
12	2.155451	62	2.827017	12	2.171073	62	2.838812
13	2.208275	63	2.829501	13	2.224555	63	2.841069
14	2.255534	64	2.831883	14	2.272377	64	2.843226
15	2.298040	65	2.834169	15	2.315362	65	2.845290
	2.336453	66	2.836363	16	2.354178	66	2.847263
17	2.371318	67	2.838469	17	2.389379	67	2.849151
18	2 ·403088	68	2.840492	18	2.421423	68	2.850958
19	2.432139	69	2.842434	19	2.450696	69	2.852828
20	2.458792	70	2.844300	20	2.477522	70	2.854343
21	2.483318	71	2.846093	21	2.502178	71	2.855929
	2.202049	72	2.847816	22	2.24899	72	2.857446
23	2.526884	73	2.849473	23	2.545891	73	2.858900
24	2.546296	74	2.851065	24	2.565327	74	2.860293
25 26	2.564336	75 76	2.852597	25	2.583362	75	2.861622
	2.281133		2.854070	26	2.600139	76	2.862906
27 28	2.596804	77	2.855486	27	2.615747	77	2.864131
	2.611449	78	2.856849	28	2.630317	78	2.865305
29	2.625158	79	2.858034	29	2.643934	79	2.866431
30	2.638011	80	2.859423	30	2·65667 6	80	2.867507
31	2.650078	81	2.860638	31	2.668618	81	2.868545
32	2.661424	82	2.861807	32	2.679823	82	2.869538
33	2.672104	83	2.862933	33	2.690350	83	2.870490
34	2.682170	84	2.864017	34	2.700253	84	2.871403
35	2.691667	85	2.865061	35	2:709576	85	2.872278
36	2.700638	86	2.866066	36	2.718364	86	2.873118
37	2.709121	1 87	2.867035	37	2.726655	87	2.873924
38	2.717148	88	2.867968	38	2.734483	88	2.874698
39	2.724752	89	2 868867	39	2.741883	89	2.875440
BO	2.731961	90	2.869732	40	2.748881	90	2.876151
41	2.738802	91	2.870567	41	2755505	91	2.876835
42	2.745298	92	2.871371	42	2.761780	92	2.877491
43	2.751470	93	2.872146	43	2.767728	93	2.878121
44	2.757339	94	2.872893	44	2.773370	94	2.878725
45	2.762924	95	2.873614	45	2.778725	95	2.879305
46	2.768242	96	2.874308	46	2.783809	96	2.879862
47	2.773308	97	2.874977	47	2.788641	97	2.880397
48	2.778137	98	2.875622	48	2.793234	98	5.880011
49	2.782744	99	2.876245	49	2.797602	99	2.881404
50	2.787139	100	2.876845	50	2·80176 0	100	2.881877

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3½ and 4 per cent., with Interest allowed to a Purchaser at 20 per cent.

DEFERRED & YEARS.

n Years	Redemption 31 per cent.	n Years	Redemption 3½ per cent.	n Years	Redemption 4 per cent.	n Years	Redemption 4 per cent.				
1	401877	51	2.326111	1	.401877	51	2.338096				
2	697502	52	2.329451	2	698719	52	2.341237				
3	923973	53	2.332643	3	926789	53	2.344230				
4	1.102920	54	2.335695	4	1.107380	54	2.347083				
5	1.247804	55	2.338613		J 1.253820	55	2.349803				
5	1.367441	56	2.341406	5 6	1.374873	56	2.352398				
7	1.467847	57	2.344165	1 7 1	1.476542	57	2.354874				
8	1.553267	38	2.346637	7 8	1.563078	38	2.357237				
او	1.626782	59	2.349089	9	1 637571	59	2.359494				
10	1 690684	60	2:351437	10	1.702324	60	2.361648				
11	1.746712	61	2.353688	111	1.759091	61	2.363708				
12	1.796208	62	2.355846	12	1.809226	62	2.365675				
13	1.840228	63	2:357916	13	1.853795	63	2:367556				
14	1.879610	64	2.359901	14	1.893646	64	2.369353				
15	1'915032	65	2.361806	15	1 929467	65	2.371073				
16	1.947043	66	2.363634	16	1.961813	66	2.372718				
17	1.976097	67	2.365389	17	1.991147	67	2.374291				
18	2.002572	68	2.367075	18	2017851	68	2:375797				
19	2026781	69	2.368693	19	2.042245	69	2.377355				
2ó	2.048992	70	2.370248	20	2.064600	70	2.378618				
21	2.069431	71	2.371742	21	2085147	71	2.379939				
22	2.088290	72	2.373179	22	2.104081	72	2.381204				
23	2.105736	73	2.374559	23	2.121574	73	2.382412				
24	2.121913	74	2.375886	24	2·13777 I	74	2.383575				
25	21136945	75	2:377162	25	2.122800	75	2.384688				
26	2.120943	76	2:378390	26	2.166773	76	2:385753				
27	2.164005	77	2.379570	27	2.179788	77	2.386774				
28	2.176206	78	2.380706	28	2.191930	78	2.387753				
29	2.187630	79	2.381693	29	2.203277	79	2.388691				
3ó	2.198341	80	2.382851	30	2.513895	80	2.389588				
31	2.208397	81	2.383863	31	2.223847	81	2.390453				
32	2.217852	82	2.384838	32	2.233184	82	2.391280				
3 3	2.226752	83	2.385776	33	2.241957	83	2.392073				
34	2.235140	84	2.386679	34	2.250209	84	2:392834				
35	2.243022	85	2.387549	35	2.257978	85	2:393563				
36	2.250230	86	2·388387	36	2.265301	86	2·394264				
37	2.257599	87	2.389194	37	2.272211	87	2.394935				
38	2.264288	88	2.389972	38	2.278735	88	2.395580				
39	2.270625	89	2.390721	39	2.284901	89	2.396198				
eo	2.276633	90	2.391442	40	2 290733	90	2.396791				
41	2.282334	91	2.392137	41	2.296253	91	2.397361				
42	2.287747	92	2.392808	42	2.301482	92	2.397908				
43	2.292890	93	2.393453	43	2.306439	93	2.398432				
44	2.297781	94	2.394076	44	2.311140	94	2·398936				
45	2.302435	95	2·394676	45	2.315602	95	2.399419				
46	2·306867	96	2.395255	46	2.319839	96	2·399883				
47	2.311089	97	2.395813	47	2.323866	97	2.400329				
48	2.312113	98	2:396350	48	2.327693	98	2.400757				
49	2.318952	99	2:396869	49	2.331333	99	2.401168				
БО	2.322614	100	2.397369	50	2.334798	100	2.401563				

TABLE XII.

Comparison of the Difference in Value between the old or ordinary
Table of Present Values, and those calculated at one rate of interest on Capital,
and at another rate for its Redemption, at the following rates.

Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemp- tion being 4 per cent.	The new Table of Present Values, Interest for Re- demption being 3 per cent. and on Capital 4 per cent.	Difference in Excess of True Value on every £r Annuity purchased by old Table, in Decimals of a Pound	Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent, lost on the Pur- chase of every £r Annuity by the old Table	Years
_				£ s. d.		
I	96154	96154	00000	0 0 0	,000	I
2	1.88610	1.87754	•00856	0 0 2	-856	2
3	277509	2.75080	02429	0 0 5	2.429	3
4	3.62990	3.58388	*04602	0 0 11	4.602	4
5	4.45182	4·37915 5·13881	07267	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7.267	5
~	5°24214 6°00206	5.86488	10333	0 2 0 4 0 2 8 3	10.333	
7	6.73275		13718		13.718	7 8
9	7:43533	6·55925 7·22367	·17350 ·21166	0 3 5 4 0 4 2 4	17·350 21·166	
10	8.11000	7.85975	25115	0 5 0	25.112	10
11	8.76048	8.46902	29146	0 5 9	29.146	111
12	9.38507	905288	'33219	0 5 9 1 0 6 7 1	33.510	12
13	9.98565	9.61265	37300	0 7 5 }	37.300	13
14	10.56312	10.14952	41355	0 7 5 2 0 8 3 2	41.322	14
15	11.11839	10.66478	45361	0 9 0	45.361	15
16	11.65230	11.15936	49294	0 9 10	49.594	16
17	12.16567	11.63433	53134	0 10 7	53.134	17
18	1265930	1209063	•56867	0 11 4	56.867	18
19	13.13394	12.25912	60479	0 12 1	60.479	19
20	13.59033	12 95073	63960	0 12 9]	63.960	20
21	14.02916	13.35617	67299	0 13 5	67.299	21
22	14.45112	13.74620	70492	0 14 1	70.492	22
23	14.85684	14.12122	73532	0 14 84	73.232	23
24	15.24696	14.48280	76416	0 15 34	76.416	24
25	15.62208	14.83066	'79142	0 15 93	79.142	25
26	15.98277	15.16570	·8170 7	0 16 4	81.707	26
27	16.32959	15.48846	84113	0 16 93	84.113	27
28	16.66306	15.79948	86358	0 17 31	86.358	28
29	16.98371	1609926	.88445	0 17 81	88.445	29
30	17.29203	16.38827	.90376	0 18 03	90:376	30
31	17.58849	16.66696	92153	0 18 5	92.123	31
32	17.87355	16.93577	93778	0 18 9	93.778	32
33	18.14765	17·19509 17·44532	·95256 ·96588	0 19 0] 0 19 3 ³	95.256	33
34 35	18.66461	17:68682	97779	0 19 6	96·588 97·779	34
35 36	1890828	17.91993	98835	0 19 9	98.835	35 36
37	19.14258	18.14499	99759	0 19 111	99.759	37
38	19.36786	18.36232	1.00554	1 0 1	100.224	38
39	19.58448	18.57222	1.01226	1 0 2	101.556	39
40	19.79277	18.77498	1.01779	1 0 4	101.779	10
41	19.99305	18.97087	1 02218		102.218	41
42	20.18563	19.16014	1.02549	1 0 5 1 1 0 6	102.249	42
43	20.37079	19.34307	I 02772	1 o 6}	102.772	43
44	20.54884	19.51987	1 02897	106	102.897	44
45	20.72004	19 69079	1.02925	107	102.925	45
46	20.88465	19.85603	1.05865	106	102.862	46
47	21 04294	20.01281	1.02713	106	102.713	47
48	21.19513	20.17033	1.02480	I O 54	102.480	48
49	21.34147	20.31978	1.02169	105	102.169	49
50	1 21.48218	20.46434	1 01784	104	101.784	50

Comparison of the Difference in Value between the old of ordinary
Table of Present Values, and those calculated at one rate of interest on Capital,
and at another rate for its Redemption, at the following rates.

					-6	
	The ordinary or	The new Table of	Difference in	Difference in	_	1
•	old Table of Present Values,	Present Values, Interest for Re-	Excess of True Value on every	Excess of True	Rate per Cent.	}
Ycars	Interest on Capital	demption being	£r Annuity	Value on every £z	lost on the Pur- chase of every	Years
	and for Redemp-	3 per cent.	purchased by old	Annuity purchased by old Table,	£: Annuity	
	tion being 5 per cent.	and on Capital	Table, in Decimals		by the old Table	l
	2 ber centre	5 per cent.	of a Pound	and Pence		
	_			8 s. d.		į
1	• 95238	95238	100000	000	*000	I
2	1.85941	1.84294	10 1647	0 0 4	1.647	2
3	2.72325	2.67716	10 4609	0 0 111	4.609	3
4	3.24595	3.45988	10 8607	0 1 8	8.607	4
5	4.32948	4'19543	13405	0 2 8	13.405	Ś
6	- 507569	4.88765	18804	0 3 9}	18.804	5
7	5.78637	5.53997	24640		24 640	7
8	6.46321	6.15550	*30771	0 4 111	30771	7 8
9	7.10782	673701	*37081	075	37 081	9
10	7.72174	728701	43473	0 7 5	43.473	1ó
11	8.30641	7.80778	49863	0 9 11	49.863	11
12	8.86325	8.30137	•56188	0 11 2	56.188	12
13	9:39357	8.76966	62391	O 12 5	62:391	13
14	9.89864	921435	68429	0 13 84	68.429	14
15	10.37966	9.63701	•74265	0 14 10	74.265	15
16	10.83777	1003907	79870	0 15 114	79.870	iś
17	11.27407	10.42182	85225	0 17 0	85.552	17
18	11.68050	10.78647	90312	0 18 0	90.315	18
19	12.08532	11.13414	95118	0 19 0	95.118	19
2ó	12.46221	11.46582	99639	0 19 11	99.639	20
21	12.82115	11.78248	103867	I 0 9	103.867	21
22	13.16300	1208497	107803	1 1 64	107.803	22
23	13.48857	12.37411	1.11446	1 2 3	111.446	23
24	13.79864	12.65063	1.14801	1 2 11	114.801	24
25	14.09395	12.91525	1.17870	1 3 6	117.870	25
26	14.37519	13.16859	1.50660	1 4 1	120.660	26
27	14.64303	13.41126	1.23177	1 4 7	123.177	27
28	14.89813	13.64382	1.5431	151	125.431	28
29	15.14102	13.86680	1.57427	I 5 54	127.427	29
30	15.37245	14.08069	1.29176	1 5 10	129.176	30
31	15.59281	14.28593	1.30688	I 5 10 I 6 11	130.688	31
32	15.80268	14.48297	1.31971	1 6 4	131.971	32
33	1600255	14.67220	1.33032	i 6 7	133.035	33
34	16.19290	14.85399	1.33891	i 6 9	133.891	34
35	16.37419	15.02871	1.34248	1 6 11	134.548	35
36	16.54685	15.19669	1.32016	170	135016	36
37	16:71129	15.35824	1.32302	I 7 0}	135.302	37
38	16.86789	15.51366	1.32423	171	135.423	38 38
39	1701704	15.66322	1.35382	I 7 0}	135.382	39
40	17.15909	15.80718	1.32101	1 7 0	132.101	10
41	17.29437	15.94581	1.34856	1 6 11	134.856	41
42	17.42321	16.07932	1.34389	1 6 10	134.389	42
43	17.54591	16.20795	1.33296	1 6 9	133.796	43
44	17.66277	16.33100	1.33087	1 6 74	133790	44
45	17.77407	16.45138	1.3556	1 2 7 1	133 007	
46	17.88007	16.2662	1.31320	1 6 5 1 1 6 3 1 1		45 46
47	17.98101	16.67764	1.30334	1 6 0	131.350	
48	18.07716	16·7847 8	1.50238	I \$ 104	130·337 129·238	47 48
49	18.16872	16.88814	1.58028	1 5 6	128058	
50	18-25593	1698788	1.56802	1 3 4 1	126.805	49 50
				- 2 48	120.003	

Comparison of the Difference in Value between the old or ordinary

Table of Present Values, and those calculated at one rate of interest on Capital,
and at another rate for its Redemption, at the following rates.

The ordinary or ordinary or ordinary or ordinary or ordinary or ordinary or ordinary or ordinary or ordinary or		una or a		100 Leccentput	on, at the lollow		
Present Values Present Values Present Values Value on every £1 Annuity purchased by old Table, and for Redemple and for Redemple and for Redemple and for Redemple and for Redemple and received and received at the present of a Pound						Rate per Cent.	Ì
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48 12:18914 11:16348 1:02566 1 0 6 102:566 48 49 12:21216 11:20911 1:00305 1 0 01 100:305 49					1	104.828	
49 12 212 16 11 209 11 1 00305 1 0 0 1 100 305 49		12.18914					
50 12·23349 11·25296 98053 0 19 7 98·053 50			,	1.00302	1 .	100.302	
		12.23349	11.25296	98053		98.053	

Comparison of the Difference in Value between the old or ordinary

Table of Present Values, and those calculated at one rate of interest on Capital,
and at another rate for its Redemption, at the following rates.

			<u> </u>			
Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemp- tion being 10 per cent.	The new Table of Present Values, Interest for Re- demption being 3 per cent, and on Capital 10 per cent.	Difference in Excess of True Value on every £: Annuity purchased by old Table, in Decimals of a Pound	Difference in Excess of True Value on every £z Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Pur- chase of every £r Annuity by the old Table	Years
]			
_				R a d		l
1	*90909	.90909	100000	000	9000	1
2	1.73554	1.68745	*04809	0 0 11	4.809	2
3	2.48685	2.36111	12574	0 2 6	12.574	3
4	3.16987	2.94962	22025	0 4 4	22 025	4
Š	3.79079	3.46795	132284	0 6 5	32.284	1 2
5	4.35526	3.92777	42749	0 8 6	42749	§
7	4.86842	4.33828	•53014		53014	=
7	5:33493	4.70685	62808	0 10 72	62.808	7
			_			
9	5.75902	5 0 3 9 4 6	71956	0 14 47	71.956	9
10	6.14457	5.34101	·80356	0 16 1	80.356	10
11	6.49506	5.61553	. 87953	0 17 74	87.953	11
12	6.81369	5.86641	94728	0 18 11	94.728	12
13	7.10336	609646	1,00600	101	100.690	13
14	7:36669	6.30810	105859	1 1 2	105.859	14
15	7.60608	6.50336	1.10223	1204	110.522	15
16	7.82371	6.68401	1.13970	1 2 9	113.970	16
17	8.02155	6.85154	1.12001	1 3 44	117001	17
18	8.20141	7:00728	1.19413	1 3 10	119.413	18
19	8.36492	,	, , ,			
20	0.30492	7.15237	1.21255	1 7 7	121.255	19
	8.51356	7.28780	1.22576		122.576	20
21	8.64869	7.41445	1.23424	1 4 84	123.424	21
22	8.77154	7.53310	1.53844	I 4 9	123.844	22
23	8.88322	7:64445	1.23877	I 4 9½	123.877	23
24	8.98474	7:74909	1.23565	1 4 8 1	123.565	24
25	9.07704	7 ·84758	1 • 22946	1 4 7	122'946	25
26	9.16095	7.94040	1.22055	1 4 5	122055	26
27	9.23722	8.02799	1.50053	1 4 21	120.923	27
28	9.30657	8.11075	1.19285	1 3 11	119.582	28
29	9.36961	8.18903	1.18020	1 3 71	118059	29
30	9.42691	8.26312	1.16376	1 3 34	116.376	30
				1 2 11		
31	9.47901	8.33341	1.14560		114.260	31
32	9.52638	8.40007	1.12631	1 2 6	112.631	32
33	9.56943	8.46338	1.10602	1 2 1	110.602	33
34	9.60858	8.52355	1.08203	1 1 8 1	108.203	34
35	9.64416	8.58080	1.06336	1 1 3 1	106.336	35
36	9.67651	8.63530	104121	1 6 10	104.151	36
37	9.70592	8.68722	1.01820	1 0 4	101.870	37
38	9.73265	8.73673	99592	0 19 11	99.592	38
39	9.75696	8.78396	97300	0 19 51	97:300	39
S Ó	9.77905	8.82906	94999	0 19 0	94.999	10
41	9.79914	8.87214	92710	0 18 61	92.710	41
42	9.81740	8.91332	90408	0 18 1	90.408	42
•		8.95270	·88130		88.130	
43	9.83400				00 1 30 9 c · 9 c ·	43
44	9.84909	8.99039	·85870	0 17 2	85.870	44
45	9.86281	9.02648	·83633	0 16 8	83.633	45
46	9.87528	9.06102	.81423	0 16 34	81.423	46
47	9.88662	9°09417	79245	0 15 101	79.245	47
48	9 89693	9.12594	'77099	0 15 5	77:099	48
49	9.90630	9.15641	'74989	0 14 114	74.989	49
50	9.91481	9.18565	72916	0 14 7	72.916	Só
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Comparison of the Difference in Value between the old or ordinary

Table of Present Values, and those calculated at one rate of interest on Capital,
and at another rate for its Redemption, at the following rates.

					<u> </u>	
Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemp- tion being 12 per cent.	The new Table of Present Values, Interest for Be- demption being 3 per cent. and on Capital 12 per cent.	Difference in Excess of True Value on every £x Annuity purchased by old Table, in Decimals of a Pound	Difference in Krosses of True Value on every £1 Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Pur- chase of every £: Annuity by the old Table	Years
						_
_	-006	-006		8 4 6		۱.
I	·89286	·89286	00000	0 0 0	0000	1
2	1 69005	1 63236	105769	O I 13	5769	2
3	2.40183	2.25464	14719	0 2 114	14.719	3
4	3.03735	2.78531	25204	050	25.504	4
5	3 60478	3.24302	•361 <i>7</i> 6	0 7 2	36.176	5
	406131	3.64169	41962	0 8 4	41 962	6
7 8	4.56376	399191	·57185	0 11 5	57:185	7 8
	4.96764	4.30188	66576	0 13 3	66.576	
9	5.32825	4.57804	75021	0 15 0	75'021	9
10	5.65022	4.82554	·82468	0 16 6	82:468	10
11	5'937 <i>7</i> 0	504853	·88917	0 17 91	88-917	112
12	6.19437	5.25039	94398	601810	94.398	12
13	6.42355	5.43391	98964	0 19 9	98964	13
14	6.62817	5.60141	1.02676	1 ó 61	102.676	14
15	6.81086	575485	1.02601	1 1 1	105.601	15
16	6.97399	5.89585	1.07814	1 1 6	107.814	16
17	7:11963	6.02582	18560.1	1 1 10	100.381	17
i8	7.24967	6.14595	1.10325	1 2 0	110.373	18
19	7.36578	6.25728	1.10820	1 2 2	110.820	19
20	7.46944	6.36069	1.10822	1 2 21	110.875	20
21	7.56200	6.45695	1.10202	1 2 1	110.202	21
22	7.64465	6.54676	109789	i ī ii	109789	22
23	7.71843	6.63469	1.08374	1 1 8	108.374	23
24	778432	6.70927	1.02202	i i 6	107.205	24
	7.84314	6.78298	106016	1 1 21	106.016	25
25 26	7.89566	6.85221	1.04345	1 0 10	104.312	26
27	7:94255	691734	1.02221	106	102.21	27
28	7.98442	6.97870	1.0022	1 0 14	102 521	28
29	802181	7.03657	98524	0 19 8	100·572 98·524	20
30	8.05518	7:09123	96395	0 19 3	96.395	30
	808499	7.14291	94208	0 18 10	94.508	31
31		7.19183	91976	0 18 43	91.976	32
32	8.11159	7.23819	89716	0 17 11	89716	_
33	8-13535	7.28216	87440			33
34	8-15656	•		- 7 - 7	87:440	34
35	8.17550	7:32390	85160	0 17 0	85.160	35
36	8.19241	7.36356	·82885		82.885	36
37	8.20751	7:40129	*80622	0 16 14	80 622	37
38	8-22099	7.43719	78380	0 15 8	78.380	38
39	8.23303	7.47139	76164	0 15 2	76.164	39
40	8-24378	7.50399	73979	0 14 9	73.979	40
41	8.25337	7.53509	71828	0 14 4	71.828	41
42	8.26194	7:56477	69717	0 13 11	69.717	42
43	8.26959	7.59312	67647	0 13 6	67.647	43
44	8.27642	7.62018	65624	0 13 1	65 624	44
45	8.28252	7.64613	63639	0 12 8	63.639	45
46	8.28796	7.67092	61704	0 12 4	61.704	46
47	8.29282	7.69465	.59817	0 11 11	59.817	47
48	8.29716	771737	:57979	0 11 7	57:979	48
49	8.30104	7.73915	.56189	0 11 2	56.189	49
50 i	8·30450 I	7.76003	'544 4 7 '	0 10 10	54.447	50

Comparison of the Difference in Value between the old or ordinary

Table of Present Values, and those calculated at one rate of interest on Capital,
and at another rate for its Redemption, at the following rates.

Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemp- tion being	The new Table of Present Values, Interest for Re- demption being 3 per cent. and on Capital	Value on every £r Annuity purchased by old Table, in Decimals	Difference in Excess of True Value on every £z Annuity purchased by old Table, in Pounds, Shillings,	Rate per Cent, lost on the Pur- chase of every £r Annuity by the old Table	Years
	25 per cent.	15 per cent.	of a Pound	and Pence	,	ł
						-
	106000	.060.	400000	£ s. d.		1 _
I	•86957	·86957	100000	0 0 0	9000	I
2	1.62571	1.22612	•06956	O I 41	6.956	2
3	2.28323	2.11180	17143	0 3 5 0 5 8 1	17.143	3
4	2.85498	2.2402	28446		28.446	4
5	3.35216	2 9 5 5 4 8	•39668	0 7 11	39.668	5
0	3.78448	3 28 302	•50146	0 10 0]	50.146	0
7 8	4.16043	3.26498	59544	0 11 10	59.244	7 8
_	4.48732	3.81016	67716	0 13 6 1	67.716	
_ 9	4 76287	402522	73765	0 14 9	73.765	9
10	5.01877	4.21531	·80346	O 16 93	80·346	10
11	5.23371	4.38448	·84923	0 16 11	84.923	11
12	5.42062	4.53593	·88469	0 17 8	88.469	12
13	5.28312	4.67225	.91090	0 18 2	91,090	13
14	5.72448	4.79556	92892	0 18 6	92.892	14
15 16	5.84737	4.90758	93979	0 18 9 §	93 [.] 979	15
	5.95423	5.00972	94448	0 18 10 1	94.448	16
17	6.04716	5.10328	'94 388	0 18 10	94:388	17
18	6.12797	5.18518	*93879	o 18 2	93 [.] 879	18
19	6.19631	5.26832	*92799	o 18 6	92.799	19
20	6.525933	5:34143	91790	0 18 4	91.790	20
21	6.31246	5.40912	90331	0 18 03	90.331	21
22	6.35866	5.47203	·88663	0 17 8	88.663	22
23	6.39884	5.23022	·86829	O 17 44	86.829	23
24	6'43377	5.58511	·84866	0 16 11	84.866	24
25	6.46412	5.63609	.82806	0 16 6	82.806	25
26	6.49056	5.68381	·8o675	0 16 14	80.675	26
27	6.21353	5.72855	78498	0 15 81	78.498	27
28	6.23321	5.27022	•76294	0 15 3	76.294	28
29	6.55088	5.81008	•74080	0 14 93	74°080	29
30	6.56684	5.84729	•71955	O 14 44	71.955	30
31	6.27911	5.88239	69672	0 13 11	69.672	31
32	6.59053	5.91528	67525	0 13 6	67.525	32
33	6.60046	5 94685	•65761	0 13 13	65.761	33
34	6.60910	5.97650	63260	0 12 7	63.260	34
35	6.61661	6.00459	61202	O 12 23	61.505	35
36	6.62314	6.03123	.29191	0 11 10	59.191	36
37	6.62881	6.05651	•57230	0 11 5 1	57.230	37
38	6.63375	6 08053	.55322	0 11 0	55.322	38
39	6.63805	6.10337	•53468	o 10 8	53.468	39
40	6.64178	6.12511	·51667	0 10 4	51.667	40
41	6.64502	6.14581	49921	0 9 11	49.921	41
42	6.64785	6.16554	48231	0 9 7	48.231	42
43	6.65030	6.18436	.46544	0 9 3	46.594	43
44	6.65244	6.20233	45011	0 9 0	45.011	44
45	6.65429	6.21948	43481	0 8 81	43.481	45
46	6.65591	6.23587	42004	0 8 4	42.004	46
47	6.65731	6.25154	40577	0 8 i I	40.27	47
48	6.65853	6.26654	.39199	0 7 10	39.199	48
49	6.65959	6.28089	*37870	0 7 63	37.870	49
50	6.66051	6.59463	•36588	0 7 3 1	36.288	50

Comparison of the Difference in Value between the old or ordinary

Table of Present Values, and those calculated at one rate of interest on Capital,
and at another rate for its Redemption, at the following rates.

			•	•	8	
Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemp- tion being 18 per cent.	The new Table of Present Values, Interest for Re- demption being 3 per cent. and on Capital 18 per cent.	The Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Decimals of a Pound	The Difference in Excess of True Value on every £: Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Pur- chase of every £1 Annuity by the old Table	Years
	.06	.9.5.6		£ a. d.		
1	*84746	.84746	100000 107890	0 0 0 0 1 64	7·890	1
2	1.56564	1.48674	18829	•	18.829	2
3	2·17427 2·65006	1·98598 2·38648	26358		26.358	3 4
4	3.12717	2.71478	41239	0 5 31	41.539	
5	3.49760	2.98867	50893	0 10 2	50.893	5
	3.81153	3.55022	.59098	0 11 9	59.098	
7 8	407757	3.41931	65826	0 13 1	65.826	7 8
9	4.30305	3.59152	71150	0 14 2	71.120	9
1ó	4.49409	3.74209	75200	0 15 0	75.200	1ó
11	4.65601	3.87481	78120	0 15 7	78.120	111
12	4.79322	3-99262	·80060	0 16 0	80060	12
13	4.90951	4.09786	·81165	0 16 2 4	81-165	13
14	5 00806	4.19241	·81565	0 16 3	81.262	14
15	5.09128	4'27777	.81381	0 10 34	81.381	15 16
16	5.16235	4.35519	180716	0 16 1	80.716	
17	5.22233	4.42571	79662	0 15 11	79.662	17
18	5.27177	4.49017	·78160	0 15 7	78.160	18
19	5.31624	4.54930	.76694	0 15 4	76.694	19
20	5:35275	4.60372	74903	0 14 11	74.903	20 21
21	5.38368	4.65394	72974	0 14 7 0 14 21	72.974	21
22	5:40990	4·70041 4·74352	•70949 •68860	0 14 24 0 13 94	70 [.] 949 68 [.] 860	23
23	5·43212 5·45095	4 /4352	66735	0 13 4	66.735	24
24 25	5.46691	4.82095	64596	0 12 11	64.596	
26	5.48043	4.85582	62461	0 12 54	62.461	25 26
27	5.49189	4.88844	60345	0 12 0	60.345	27
28	5.20160	4.91900	·5826o	0 11 7	58.260	28
29	5.50983	4.94769	.56214	0 11 2	56.214	29
3Ó	5.21681	4.97465	.54216	0 10 10	Š 4·216	30
31	5.52272	5 00003	•52269	0 10 5	52.269	31
32	5:52773	5 02 395	.50378	0 10 0	50.378	32
33	5.53197	5.04653	48544	0 9 8	48.544	33
34	5.53557	5 06 786	46771	0 9 4	46.771	34
35	5.53862	5 08804	45058	0 9 0	45 058	35 36
36	5.54089	5.10712	43374		43'374	
37 38	5.24327	5.12527	.41800 .40279	0 8 41 0 8 01	41·800 40·279	37 38
	5.24525 5.24682	5 ⁻ 14246 5 ⁻ 15879	.38803	079	38.803	39
39	5.24812	5.12431	·37384	0 7 51	37 ·384	40
41	5.54928	5.18908	3/304	0 7 2	36.050	41
42	5.55024	5.50314	34710	0 6 113	34.710	42
43	5.22102	5.51624	33451	0 6 8	33.451	43
44	5.55174	5.5531	32243	0 6 5	32.243	44
45	5.55232	5.24150	.31082	0 6 2	31 082	
46	5.55281	5.25313	•29978	0 5 11	201978	45 46
47	5.55322	5.26425	·28897	0 5 6	28.897	47 48
48	5.22359	5.27488	27871	0 5 6	27.871	
49	5.55389	5.58202	•26884	0 5 6 0 5 4 0 5 2	26.884	49
50	5.22414	5 29477	25937	0 5 21	25.937	50

Comparison of the Difference in Value between the old or ordinary

Table of Present Values, and those calculated at one rate of interest on Capital,
and at another rate for its Redemption, at the following rates.

				,	-6	
Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemp- tion being so per cent,	The new Table of Present Values, Interest for Re- demption being 3 per cent, and on Capital 20 per cent.	The Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Decimals of a Pound	The Difference in Excess of True Value on every £z Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Pur- chase of every £: Annuity by the old Table	Years
				£ 4. 4.		
I	•83333	•83333	20000	0 0 0	9000	I
2	1.2778	1.44381	~ 08397	8 1 0	8:397	2
3	2'10648	1.01011	•19637	0 3 11 0 6 2 1	19637	3
4	2.58873	2.27776	*31097		31 097	4
5	3,99061	2·57497 2·82010	41564	0 8 3	41.564	5
0	3.32551		*50541	0 10 1	50.541	0
7	3.60459	3°02566 3°20045	•57893 •63671	0 11 62 0 12 82	57 [.] 893 63 [.] 671	7 8
9	3.83716	3.32083	68014		68014	9
10	4°3097 4°19247	3.48152	71095	0 13 7 0 14 21	71 095	10
11	4.32706	3.59613	•73094	0 14 7	73 094	111
12	4.43922	3.69738	74184	0 14 10	74.184	12
13	4.53268	3.78745	74523	0 14 10}	74.523	13
14	461057	3.86808	74249	0 14 10	74.549	14
15	4.67547	3 94063	73484	0 14 8 1	73.484	15
16	4.72956	400624	72332	C 14 5	72.332	16
17	4.77463	4.06583	*70880	0 14 2	70·88o	17
18	4.81219	4.15012	69202	0 13 10	69.202	18
19	4.84584	4.16990	67594	0 13 6	67.594	19
2ó	4.86887	4.21557	65330	0 13 04	65.330	20
21	4.89132	4.25764	63368	0 12 8	63·368	21
22	4.90943	4.29650	61293	0 12 3	61.293	22
23	4~92453	4.33249	•59204	0 11 10	59.204	23
24	4.93710	4.36591	.57119	0115	57.119	24
25	4.94759	4.39700	•55059	0110	55~59	25
26	4.95632	4.42599	.23033	0 10 7	53033	26
27	4.96360	4.45307	.21023	O IO 2	51.053	27
28	4.96967	4.47842	49125	0 9 9	49.125	28
29	4'97472	4.20218	47254	0 9 51	47.254	29
30	4.97894	4.2449	°45445	0 9 I 0 8 8	45.445	30
31	4°98245 4°98537	4.24248	43697 42013	0 8 4	43 [.] 697 42 [.] 013	31
32	4 98537	4·56524 4·58387	40397	0 8 0	40.397	32
33 34	4.98984	4.60147	·38837	0 7 9	38.837	34
35	4'99154	4.61810	37344	0 7 51	37:344	35
36	4.99295	4.63384	35911	0 7 2	35.911	36
37	4.99413	4.64875	34537	0 6 10}	34.537	37
38	4.99510	4.66289	*33221	0 6 7	33.551	38
39	4.99592	4.67631	.31961	0 6 4	31.961	39
žó	4.99660	4.68906	*30754	0 6 i 3	39.754	10
41	4.99717	4.70118	*29597	0 5 11	29.597	41
42	4.99764	4.71272	*28492	o 5 81	28.492	42
43	4.99803	4.72371	'27432	0 5 5	27.432	43
44	4.99836	4.73418	.26418	0 5 3	26.418	44
45	4.99863	4.74417	*25446	051	25.446	45 46
46	4.99886	4.75370	*24516	0 4 10	24.516	
47	4.99905	4.76280	*23625	0 4 8	23.625	47
48	4.99921	4.77150	*22771	0 4 6 4 0 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.771	48
49	4.99934	4.77981	21953	1 7 7	21.953	49
50	4.99945	4.78777	21168	0 4, 2 1	21.618	150

TABLE XIII.

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Present Value of £1 per Annum in n years, Redemption of Capital being at 2 and 2½ per cent., with Interest allowed to a Purchaser at the same rates per cent.

Yours	2 per cent.	n Years	2 per cent,	n Years	21 per cent.	Years	21 per cent.
-	98039	51	31.78785	1	·97561	51	28.64616
2	1.04156	52	32.14495	2	1.92742	52	28 92 308
3	2.88388	53	32.49505	3	2.85602	53	29.19325
4	3.80773	54	32.83828	4	3·7619 7	54	29.45683
71	4.71346	55	33.17479	اغا	4.64583	55	29.71398
\$	5.60143	56	33.50469	5	5.20813	56	29.96456
~	6.47199	57	33.82813	1 7	6.34939	57	30.50065
7 8	7.32548	38	34.1223	7 8	7.17014	58	30.44841
	8.16224	59	34.45610	9	7.97087	59	30.68137
10	8-98259	60	34.76089	10	8.75206	60	30.90866
11	978685	61	35 05969	111	9.51421	61	31.13040
12	10.57534	62	35.35264	12	10.25777	62	31:34673
13	11.34837	63	35.63984	13	10.98319	63	31.25778
14	12.10622	64	35.92142	14	11.69091	64	31.76369
15	12.84926	65	36·1974 7	15	12.38138	65	31 96458
16	13.57771	66	36.46810	16	1305500	66	32.16056
17	14.29187	67	36.73344	17	13.71220	67	32.35177
18	14.99203	68	36.99356	18	14.35336	68	32.23831
19	15 67846	69	37.24859	19	14.97889	69	32.72031
2ó	16.35143	70	37.49862	20	15.28916	70	32.89786
21	1701121	71	3774374	21	16.18455	71	3307108
22	17.65805	72	37.98406	22	16.76541	72	33.24008
23	18.29220	73	38.21967	23	17.32211	73	33.40495
24	18-91393	74	38·4506 6	24	17.88499	74	33.26281
25	19.52346	75	38.67711	25	18:42438	75	33.72274
26	20.13104	76	38.89913	26	18-95061	76	3 3 [.] 87584
27	20.70690	77	39·11680	27	19:46401	77	34.02521
28	21.28127	78	39.33019	28	1996489	78	34.17094
29	21.84439	79	39.53940	29	20:45355	79	34 ·3131 1
30	22.39646	80	39.74451	30	2 0.9302 9	80	34.45182
31	22.93770	18	39:94560	31	21.39541	18	34 ·5871 4
32	23.46834	82	40.14272	32	21.84918	82	34.71916
33	23.98856	83	40.33603	33	22.29188	83	34.84796
34	24.49859	84	40.52552	34	22.72379	84	34 97 362
35	24.99862	85	40.71129	35	23.14516	85	35 09622
36	25.48884	86	40.89342	36	23.55625	86	32.51283
37	25.96945	87	41 07 198	37	23°95732	87	35.33251
38	26.44064	88	41 24704	38	24·3 4 860	88	35.44635
39	26:90259	89	41.41867	39	24 ·7 3 034	89	35.55741
40	27:35548	90	41.58693	40	25.10278	90	35 ⁶⁶ 577
41	27:79949	91	41.75189	47	25.46612	91	35.77148
42	28.23479	92	41.91362	42	25.82061	92	3587462
43	28.66156	93	42'07218	43	26.16645	93	35.97524
44	29.07996	94	42.22762	44	26·50385	94	36.07.340
45	29:49016	95	42.38002	45	26.83302	95	36.16912
46	29.89231	96	42.52943	46	27.15417	96	36.26261
47	30.28658	97	42.67592	47	27.46748	97	36.35376
48	30.67312	98	42.81953	48	27.77315	98	36.44269
49	31 05208	99	42 96032	49	28.07137	99	36.52946
50	31.42361	100	43.09835	50	28.36231	100	36.61411

Present Value of £1 per Annum in n years, Redemption of Capital being at 3 and 3½ per cent., with Interest allowed to a Purchaser at the same rates per cent.

BALLO TAVOS PCT COLLA								
Years	3 per cent.	Years	3 per cent.	n Years	31 per cent.	n Years	81 per cent.	
1	97087	51	25.95123	1	96618	51	23-62862	
2	1.91347	52	26.16624	2	1.89969	52	23.79577	
3	2.82861	53	26.37499	3	2.80164	53	23.95726	
Δl	3.71710	54	26·57 766	4	3.67308	54	24 11330	
5	4'57971	155	26.77443	5	4.51505	55	24.26405	
	5.41719	56	26.96546	6	5.32855	56	24.40971	
7 8	6.53058	57	27:15094	7 8	6.11454	57	24.55045	
8	701969	58	27:33101	8	6.87396	58	24.68642	
9	7.78611	59	27.50583	9	7.60769	59	24.81785	
10	8.53020	60	27 67556	10	8-31 6 61	60	² 4 ⁻ 9447 3	
11	9.25262	61	27.84035	111	900155	61	25.06738	
12	9.95400	62	28.0003 4	12	9:66333	62	25.18587	
13	10.63496	63	28.15567	13	10 [.] 30274	63	25:30036	
14	11.29607	64	28·30648	14	10.92052	64	25.41097	
15	11.93794	65	28.45289	15	11.21741	65	25.5178 5	
16	12.26100	66	28.59504	16	12'09412	66	25.62111	
17	13.16615	67	28.73305	17	12.65132	67	25.72088	
18	13.75351	68	28.86704	18	13.18968	68	25.81726	
19	14.32380	69	28.99712	19	13.70984	69	25.91041	
20	14.87748	70	29.12342	20	14.51540	70	26.00040	
21	15.41502	71	29 24604	21	14 ·69 797	7.1	26:08734	
22	15.93692	72	29:36509	22	15.16713	72	26.17134	
23	16.44361	73	29.48067	23	15.62041	73	26.25251	
24	16.93554	74	29.59288	24	16:05837	74	26 33092	
25	17.41315	75	29.70183	25	16:48152	75	26.40669	
26	17:87684	76	29.80760	26	16.89035	76	26:47989	
27	18.32703	77	29.91029	27	17:28537	77	26.55062	
28	18.76412	78	30.01000	28	17:66702	78	26.61896	
29	19.18856	79	30.10679	29	18-03577	79	26·68498	
30	19.60044	80	30.30076	30	18.39205	80	26.74878	
31	20.00043	81	30.29200	31	18.73628	81	26.81041	
32	2 0:3887 7	82	30 38059	32	19.06887	82	26·869 96	
33	20 .76579	83	30.46659	33	19:39021	83	26·9275 0	
34	21.13184	84	30.25009	34	19.70068	84	26.98309	
35	21 48722	85	30.63115	35	20.00066	85	27 03680	
36	21 83225	86	30 70986	36	20.29049	86	27:08870	
37	22.16724	87	30 :78627	37	20.57053	87	27 ·1 3884	
38	22:49246	88	30[.]86 045	38	20.84109	88	27.18729	
39	22 80822	89	3 0: 93 248	39	21.10258	89	27.23409	
40	23.11477	90	31 00241	40	21.35507	90	27.27932	
41	23.41240	91	31 07030	41	21.59910	91	27:32301	
42	23,70136	92	31'13621	42	21.83488	92	27·3652 3	
43	23′98190	93	31.50051	43	22:06269	93	27:40602	
44	24.25427	94	31'26234	44	22 28279	94	27.45543	
45	24.21871	95	31.32266	45	22.49545	95	27 48350	
46	24.77545	96	31.38122	46	22.70092	96	27.52029	
47	25.02471	97	31.43808	47	22 89944	97	27.55584	
48	25.56621	98	31.49328	48	23.09124	98	27 59018	
49	25.20166	99	31.54687	49	23.27656	99	27 62337	
50	25 .72976	100	31.20201	50	23.45562	100	27 65543	

TABLE XIV.

Present Value of £1 per Annum in n years. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at the following rates per cent.:—

n Years	30 per cent.	35 per cent.	40 per cent.	45 per cent.	n Years
1	7692	.7407	7143	-6897	1
3	1 6038	1.4847	1.3851	1.2928	131
5	2.0477	1.8575	1.6997	1.2665	3 5 6
6	2.1997	1.9818	1.8031	1.6540	
8	2.4245	2.1654	1.9514	1.7779	8
10	2.5826	2.2871	20524	1.8614	10
I 2	2.6993	2.3783	2.1256	1.9214	12
15	2.8267	2.4767	2.2038	1.9850	15
20	2.9655	2.2822	2.2877	20525	20
22	3.0023	2.6127	2.3108	2.0712	22
25	3°541	2.6495	2.3396	2.0946	25
27	3.0811	2.6698	2.3554	2.1072	27
30	3.1121	2.6953	2.3752	2.1231	30
32	3.1343	2.7097	2.3864	2.1320	32
35	3.1592	2.7282	2.3912	2.1434	35
37	3.1735	2.7389	2.4090	2.1500	37
40	3.1922	2.7528	2.4198	2.1286	40
42	3.5035	2 7610	2.4261	2.1636	42
45	3.5177	2.7702	2.4344	2.1703	45
47	3.5565	2.7781	2.4393	2.1741	47
50	3'2377	2.7866	2 ⁻ 4458	2.1793	50
52	3.5442	2.7916	2.4497	2.1824	52
55	3.2536	2.7984	2.4549	2.1862	55
57	3.2591	2.8024	2.4580	2.1890	57
60	3.2666	2.8079	2.4622	2.1923	60
65	3.5271	2.8157	2.4682	2.1971	65
70	3.5828	2.8222	2.4732	2.3010	70
75	3.5 931	2.8275	2.4773	2.2043	75
80	3.5991	2.8320	2.4807	2.2020	80
90	3.3082	2.8388	2.4866	2.5111	90
100	3.3151	2.8438	2.4898	2.5141	100

TABLE XV.

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 30 per cent.

n Years	Deferred 1 Year	Deferred 2 Years	Deferred 3 Years	Deferred 4 Years	Deferred 5 Years	n Years
1	.5917	·4552	-3501	2693	·207 2	1
3	1.5337	9490	7305	•5615	.4320	3
5	1.5752	1.2117	9321	7205	.5515	5
6	1.6921	1.3016	1.2374	.7702	.5924	
8	1.8620	1.4346	1.1036	·8489	·653 o	8
10	1 9866	1.282	1.1752	9042	•6956	10
12	20764	1.2972	1.550	9451	7270	12
15	2.1744	1.6726	1.5866	9897	7613	15
20	2.5813	1.7547	1.3500	1 0383	7987	20
22	2:3118	1.7783	1.3679	10522	8094	22
25	2.3493	1.8072	1.3901	10693	8226	25
27	2.3701	1.8231	1.4024	1 0788	.8298	27
30	2.3962	1.8433	1.4179	1 0907	8390	30
32	2.4110	1.8546	1.4266	1.0974	.8442	32
35	2.4302	1.8694	1.4380	1.1061	8509	35
37	2.4412	1.8778	1.4445	1.1111	·8547	37
40	2.4555	1.8889	1.4530	1.1177	8598	40
42	2.4639	1.8953	1.4580	1.1212	-8627	42
45	2.4752	1 9040	1.4646	1.1366	8666	45
47	2.4817	1.9659	1.2122	1.1632	·8689	47
50	2.4905	1.9666	1.5128	1.1637	8720	50
52	. 2.4958	1:9670.	1.2131	1.1639	·8738	52
55	2.5028	1.9676	1.2132	1.1643	8763	55
57	2.5070	1.9679	1.2138	1.1645	-8778	57
60	2.5128	1.9684	1.2141	1.1642	18798	60
65	2.5214	1.9690	1.5146	1.1621	8825	65
70	2.5275	1.9695	1.2120	1'1654	·885ó	70
75	2.5332	1.9700	1.2124	1.1657	•8869	75
80	2.5378	1.9704	1.2122	1.1659	·888 ₅	86
90	2.2450	1.9709	1.2161	1.1662	.8911	90
100	2.2201	1.9713	1.5146	1.1662	.8929	100

TABLE XVI.

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 35 per cent.

	Deferred 1 Year	Deferred 2 Years	Deferred 3 Years	Deferred 4 Years	Deferred 5 Years	. n Years
1	·5561	.4064	.3011	.2230	1652	1
3	1.1146	·8146	.6034	4470	3311	3
5	1.3945	1.0192	7550	.5592	4142	5
	1.4878	1.0874	·8055	.5967	*4420	
. 8	1.6234	1.1862	·8789	.6510	.4822	8
10	1.7170	1.2549	*9296	·6886	.2100	10
12	1.7855	1.3049	. •9666	7160	.5504	12
15	1.8594	1.3589	1.0066	7457	5523	15
20	1.9388	1.4170	1 0496	7775	.5759	20
22	1.9615	1.4336	1.0619	•7886	.5827	22
25	1.9891	1.4538	1.0769	7977	15909	25
27	2.0043	1.4610	1.0822	·801 <i>7</i>	·59 3 8	27
30	20235	1.4789	1.0955	-8115	.6011	30
32	20343	1.4868	1.1013	·8158	•6043	32
35	2.0482	1.4969	1.1088	.8214	6084	35
37	2.0562	1.5028	1.1132	·8246	.6108	37
40	2:0666	1.5104	1.1188	·8288	•6139	40
42	2.0728	1.5149	1,1555	.8313	6157	42
45	2.0797	1.200	1.1259	·8340	6178	45
47	2.0856	1.5243	1.1501	·8364	-6196	47
50	2.0920	1.5290	1'1326	8390	6214	50
52	2.0958	1.2317	1'1346	.8407	6226	52
55	2'1009	1.5355	1.1374	8425	·624I	55
57	2.1039	1.5376	1.1390	8436	·6250	57
60	2.1080	1.5407 -	1.1415	·8454	·626 2	60
65	2.1139	1.5449	1.1444	·8477	6279	65
70	2.1187	1.5485	1.1471	·8497	·6294	70
75	2.1227	1.5514	1.1492	·8513	•6306	75
80	2.1261	1.5539	1.1211	·8527	-6 316	80
90	2.1312	1.5576	1.1538	8547	·6331	90
100	2,1350	1.2604	1 1558	8562	6342	100

TABLE XVII.

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 40 per cent.

n Years	Deferred 1 Year	Deferred 2 Years	Deferred 3 Years	Deferred 4 Years	Deferred 5 Years	n Years
1	.2102	·3644	2603	·1859	·1328	1
3	9872	.7052	.5037	·3598	.2570	3
5	1.5141	•8672	6194	·4424	·3160	5
	1.3880	9200	•6571	4694	*3353	6
8	1.393 9	9956	7111	•5080	•3628	8
10	1.4660	1 0470	7480	·5343	.3818	10
12	1.2183	1 0845	*7746	·5533	.3952	12
15	1.5747	1.1244	8031	·5737	4098	15
20	1 6344	1.1672	8337	.5953	4254	20
22	1.6508	1.1790	8421	6015	4296	22
25	1.6712	1.1937	8526	·6090	4350	25
27	1.6824	1.5016	1 ⋅ ⋅8 < 84	6131	4379	27
30	1.6986	1.5119	·8656	6183	·4416	30
32	17046	1.5177	·8697	6212	4439	32
35	1.7082	1.3303	8715	6225	·4447	35
37	1.7207	1.5501	8779	6271	·4479	37
40	1.7284	1.2346	8188	6300	4499	40
42	1.7329	1.5378	·8841	6315	4511	42
45	1.7389	1.5451	8872	6337	4526	45
47	1.7424	1.2446	-8890	6350	4535	47
50	17470	1.2479	-8913	6367	4547	50
52	1.7498	1.5499	1 '8927	6384	4555	52
55	1.7535	1.5252	18946	6390	4564	55
57	1.7557	1.5241	1 .8928	6398	4570	57
60	1.7587	1.2562	1 8973	6409	4578	60
65	17630	1.5293	·8995	6425	4589	65
70	1.7666	1.5610	9013	6438	4598	70
75	1.7695	1.2639	9028	6449	4606	75
80	17719	1.2656	9040	1 .6458	4612	80
90	1.7757	1.2684	9060	6471	.4622	90
100	1.7784	1.2703	9074	6481	•4629	100

TABLE XVIII.

Present Value (or Years' Purchase) of £1 per Annum in n years, after t years' Deferrence. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 45 per cent.

n Years	Deferred 1 Year	Deferred 2 Years	Deferred 3 Years	Deferred . 4 Years	Deferred 5 Years	n Years
1	·475 7	3280	.2262	·1560	1084	1
3	.8916	6149	'4241	.2925	.2017	3
5	1.0803	7451	-5138	3544	*2444	5
	1.1402	.7867	.5425	.3742	·2581	
8	1.5591	·8456	.5832	4024	2774	8
10	1.2837	·8853	6106	4211	.2904	10
12	1.3251	.9139	6303	·4347	•2998	12
15	1.3690	·9441	6511	·4490	·3097	-15
20	1.4155	9762	6733	4643	.3202	20
22	1.4286	9852	6793	·4686	.3232	22
25	1.4442	19962	·6871	.4738	·3268	25
27	1.4532	1.0022	.6912	4767	.3288	27
30	1.4642	1.0008	.6 964	·48o3	3312	30
32	1.4703	1.0140	•6393	4823	.3326	32
35	1.4782	1.0194	.7031	4849	·3344	35
37	1.4827	1 0226	.7052	.4864	·335 <u>4</u>	37
40	1.4887	1.0267	.7081	4883	.3368	40
42	1 4927	1.0291	'7097	4894	.3376	42
45	1*4967	1.0323	7119	49 09	·3386	45
47	1.4994	1.0340	.7131	.4918	.3392	47
50	1.2030	1 0365	7149	.4930	.3400	50
52	1.2021	1.0380	7159	'4937	.3402	52
55	1.2023	1.0399	7172	'4946	.3411	55
57	1.2096	1.0416	7180	4952	.3412	57
60	1.2119	1.0422	7191	.4961	13420	60
65	1.212	1.0450	'7207	'4970	.3428	65
70	1.2172	1.0468	7220	'4979	'3434	70
75	1.202	1.0484	7231	4987	'3439	75
80	1.2251	1.0492	7239	.2003	*3443	80
90	1.249	1.0216	. 7253	5008	.3450	90
100	1.270	1.0231	7263	.2009	3454	100

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